BMC

Journal of the Canadian Health Libraries Association

Bibliotheca Medica Canadiana

Le journal de l'Association des bibliothèques de la santé du Canada

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Bibliotheca Medica Canadiana

Summer 2002, Volume 23 Number 4
Special theme issue on PDAs

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BIBLIOTHECA MEDICA CANADIANA

Bibliotheca Medica Canadiana (BMC) is a journal providing for increased communication among health libraries and health science librarians in Canada. A special commitment has been made to reach and assist the worker in the smaller, isolated health library.

BMC is published quarterly by the Canadian Health Libraries Association. Opinions expressed herein are those of the contributors and the Editor and not CHLA/ABSC.

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BMC a pour objet de permettre une meilleure communication entre toutes les bibliothèques médicales et entre tous les bibliothécaires qui travaillant dans le secteur des sciences de la santé. Nous nous engageons tout particulièrement à atteindre et à aider ceux et celles qui travaillent dans les bibliothèques de petite taille et les bibliothécaires relativement isolées.

BMC est publié 4 fois par année par l'Association des bibliothèques de la santé du Canada. Les articles paraissant dans BMC expériment l'opinion de leurs auteurs ou de la rédaction et non pas celle de l'Association.

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Editor's Message

Ellen Crumley

This special theme issue is devoted to personal digital assistants, PDAs or handhelds, those handy devices that, like e-mail, most of us cannot live without! Tom Flemming, well-known for his knowledge of PDAs, has kindly contributed an editorial and co-edited the two feature articles about PDAs in this issue. Luckily, I was able to persuade Tom to take time out of his busy schedule to contribute to this issue.

In this issue, we have a wide variety of feature articles in addition to the two on PDAs. Robert Janke provides a unique perspective about Loansome Doc, and Andrew Booth and Jon Eldredge provide a thought-provoking dialogue about Evidence-based Librarianship (EBL). Mike Fraumeni provides an update to his CPG study originally published in *BMC* 23(2). Tracy Havlin's interview with Jim Henderson about winning the Distinguished Service and Leadership Award provides insight into the working life of a long-time CHLA/ABSC member. As well, we have the second *Complementary and Alternative Medicine* column along with *Consuming Health Information* and *Cyberpulse*.

I hope everyone enjoyed themselves at this year's annual conference in Kitchener-Waterloo. I was sorry to have missed such a wonderful time (perhaps some of you caught a glimpse of Patrick in leiderhosen?!) as well as the unique program and events. Both the Quebec City and Kitchener-Waterloo Conferences will stay in the minds of CHLA/ABSC members for years to come and we send our thanks to both planning committees for all the good memories they have given us and all the hard work they put into the planning.

Speaking of which... There have been several exciting developments with future CHLA/ABSC Conferences. In 2003, the Conference will be held in Edmonton from May 31 to June 4 <www.chla-absc.ca/2003>. In 2004, we're moving across the country to St. John's, Newfoundland and Toronto has decided to host the 2005 Conference. In the next three years, CHLA/ABSC members will have the chance to travel all over Canada and experience the wonderful hospitality of the different chapters. In addition, the 2nd EBL Conference <www.eblib.net> will be held right after CHLA/ABSC 2003, June 5 to 6, on the University of Alberta campus. We highly recommend that you come to Alberta for CHLA/ABSC 2003, stay for EBL 2003 and take your family for a fabulous holiday in the Rockies. What better way to spend the first few weeks in June!

I would also like to welcome the following new members to CHLA/ABSC: Christine Chang, Mary McDiarmid, Marie-Hélène Morneau, Pearl Raju, Nancy Roberts, Carole Taylor, Jill Buckley Smith, Heather Cunningham, Seana Collins, Harriet M. Rykse, Alex L. Adams, Melanie A. Weger, Harriet M. Rykse, Nancy E.L. Birch and Lindsay J. Ogilvie.

I also have the pleasure of welcoming Karen Neves, from Dalhousie University, as the new Assistant Editor. Your future editor, Andrea Hodgson, and Karen bring unique perspectives and experiences to *BMC* and I look forward to seeing the fruits of their labor in the December issue. •
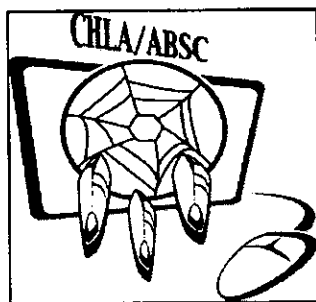
The Spirited Connection
Liens Animés

CHLA/ABSC Conference 2002
May 28 – June 1
Waterloo, ON

A great big thank you for attending our CHLA/ABSC Conference!

We hope you found the experience invigorating. We loved having you with us and sharing the pleasures of Waterloo County.

And please remember, Edmonton 2003 is just around the corner.

A Word from the President

Jessie McGowan

I t is hard to believe that it has already been a year since I took on the role of CHLA/ABSC. What a busy and exciting year it has been. It's our 26th year and the first time that the Board has conducted a Membership Survey. The Survey was posted electronically this past March and had a great response. A great deal of analysis has arisen from this project and we hope to be able to share detailed information later this Fall. A Task Force, headed by Patrick Ellis, will be implemented to review and disseminate results and will be recruiting members from the Association to participate.

The CHLA/ABSC Conference 2002 was held from May 28 to June 1. It was a huge success with approximately 204 registrations. The program and continuing education sessions based on the theme, "The Spirited Connection," were well received by attendees. In addition, many exhibitors were also available to discuss their products and the hospitality events were very fun and lively.

At the CHLA/ABSC Conference 2002 Banquet, the Board presented a number of awards. This year, two of our colleagues received the CHLA/ABSC Award of Outstanding Achievement. Louise Bourbonnais was recognized for her hard work on the implementation of DOCLINE in Quebec, and for her many contributions to the National Network of Libraries for Health Steering Group. Tom Flemming was recognized for his outstanding contributions to the field of health librarianship. He has played an important role in the education of clinicians and librarians throughout his career and has received much recognition outside of the profession for his Web site, "Health Care Information Resources... for patients, their families" <*http://hsl.mcmaster.ca/tomflem/intro.html*>. Nancy McAllister was awarded the CHLA/ABSC Canadian Hospital Librarian of the Year Award. On the national level Nancy has recently completed a two-year appointment as CHLA/ABSC Representative to the Canadian Council on Health Services Accreditation (CCHSA). On the local level she has contributed immensely during the past four years as a valued executive member of the Maritimes Health Libraries Association. The B.C. Decker Research Paper Prize was awarded to the paper *Peer informatics tutoring for medical students* published in *BMC* 2001, volume 22(3).

This year, the Board introduced "Recognition Awards" to celebrate individuals who have worked with the Board. Awards were presented to Patrick Ellis for his work as President, George Beckett for his contributions as ACMC Liaison (and for having a great Board memory), Nancy McAllister for her work as the CHLA/ABSC Representative to the Canadian Council on Health Services Accreditation (CCHSA), Richard Thornley for his work as *BMC* Editor and Laurie Scott for her dedication as CE Director.

Congratulations to all the members of the CHLA/ABSC Conference 2002 Planning Committee who worked so hard to make this a success. Ed, the Edmontosaurus (a large, plant-eating, duck-billed dinosaur from the late Cretaceous period) is eagerly awaiting your visit to the CHLA/ABSC Conference 2003 in Edmonton. Information on this Conference is available at <*http://www.chla-absc.ca/2003/*>.

It has been a pleasure to work with all the wonderful folk from the Board and the Secretariat, and I look forward to continued success for CHLA/ABSC. ♦

Un mot de la presidente

Jessie McGowan

Il est difficile de croire qu'une année s'est écoulée depuis que j'ai accepté d'assumer le rôle de président de l'ABSC/CHLA. Quelle magnifique année productive nous avons vécue! Il s'agissait de notre 26ᵉ année d'existence et de la première fois que le Conseil menait un sondage auprès de ses membres. Le sondage a été affiché électroniquement en mars dernier et a suscité un grand intérêt. Ce projet nous a permis de faire bien des analyses et nous espérons être en mesure plus tard cet automne de vous faire part des détails de nos conclusions. Un groupe de travail dirigé par Patrick Ellis sera mis sur pied pour examiner et diffuser les résultats. Nous recruterons des membres de l'Association pour en faire partie.

Le Congrès 2002 de l'ABSC/CHLA s'est déroulé du 28 mai au 1ᵉʳ juin dernier. Il a connu un immense succès. Il y a eu 204 inscriptions. Le programme et les séances de formation permanente qui s'inspiraient du thème La connexion animée ont été fort appréciés des participants et participantes. Bon nombre d'exposants étaient également sur place et disponibles pour discuter de leurs produits. En outre, les activités étaient fort amusantes et très animées.

Lors du banquet du Congrès 2002 de l'ABSC/CHLA, le Conseil a présenté un certain nombre de prix. Cette année, deux de nos collègues ont reçu le prix d'excellence de l'ABSC/CHLA. Louise Bourbonnais a vu son dur travail de mise en oeuvre de DOCLINE au Québec de même que ses

nombreuses contributions au sein du groupe de direction du Réseau national des bibliothèques de santé reconnu par ses pairs. On a rendu hommage à Tom Flemming pour ses contributions remarquables dans le secteur de la bibliothéconomie de la santé. Il a joué un rôle important dans l'éducation des cliniciens et des bibliothécaires tout au long de sa carrière. Son site Web «*Health Care Information Resources... for patients, their families)*» dont l'adresse Internet est <*http://hsl.mcmaster.ca/tomflem/intro.html*> a reçu bien des hommages de l'extérieur de la profession. Nancy McAllister a reçu le prix de l'ABSC/CHLA de la bibliothécaire de l'année en milieu hospitalier canadien. Au palier national, Nancy a récemment complété un mandat de deux ans à titre de représentante de l'ABSC/CHLA au sein du Conseil canadien d'agrément des services de santé (CCASS). Au palier local, elle a fait un travail remarquable au cours des quatre dernières années comme membre de la direction de l'Association des bibliothèques de la santé des Maritimes. Le prix du document de recherche BC Decker a été attribué au document *Peer Informatics Tutoring for Medical Students* qui a été publié dans le volume 22(3) de *BMC* en 2001.

Cette année, le Conseil a remis de nouveaux prix pour souligner le mérite de personnes qui ont travaillé au sein du Conseil. Ces prix ont été présentés à Patrick Ellis pour son travail de président, à George Beckett pour sa contribution comme agent de liaison avec la AFMC (et pour son excellent rôle de mémoire du conseil), à Nancy McAllister pour son travail à titre de représentante de l'ABSC/CHLA au sein du Conseil canadien d'agrément des services de santé (CCASS), à Richard Thornley pour son travail d'éditeur de *BMC* et Laurie Scott pour son dévouement comme directrice de la formation professionnelle.

Mes plus sincères félicitations à tous les membres du Comité de planification du Congrès 2002 de l'ABSC/CHLA qui ont travaillé si fort pour en faire un tel succès. Ed, le Edmontosaurus (qui est un imposant dinosaure herbivore à bec de canard de la fin du Crétacé) attend avec impatience votre visite lors du Congrès 2003 de l'ABSC/CHLA qui aura lieu à Edmonton. Des renseignements sur ce congrès sont disponibles à l'adresse Internet <*http://www.chla-absc.ca/2003/>*.

Ce fut très agréable de travailler avec tous ces merveilleux amis du Conseil et du Secrétariat. Je souhaite le plus grand des succès à l'ABSC/CHLA.   ◆

CHLA/ABSC Has a New Web Address!

http://www.chla-absc.ca

The announcement went out March 4, 2002 – yes indeed, CHLA/ABSC has a new e-home! The Web site can be found at the 'official' address above but you can also reach the site via <*http://www.chla-absc.org*>. The old address on the Memorial University's server has a re-direct to the new address so please update your bookmarks! Thanks goes to the Memorial folks who hosted the site over the years with a special thank you to George Beckett and Shelagh Wother-spoon. The CanMedLib discussion list continues to be hosted by Memorial and administered by Susan Cleyle.

Tim Tripp
CHLA/ABSC Director, Public Relations

U.S. Government Offers $10 Million to Address Librarian Labour Shortage

http://www.imls.gov/

The famous U.S. librarian of the moment, the First Lady Laura Bush, announced on January 10, 2002 a proposal for $10 million (U.S.) initiative to recruit a new generation of librarians. This initiative is to be managed by the Institute for Museum and Library Services. In Mrs. Bush's speech, she quoted from the May 2002 issue of *Library Journal* such statistics as 40% of library directors are to retire in nine years or less. The initative entitled *No Child Left Behind Act* emphasizes the connection between education, lifelong learning and libraries. For more information on the impending librarian labour shortage, see the March 2002 issue of *American Libraries*.

IMLS press release

Moving Organization 'By the seat of your pants' to the Palm of Your Hand

Tom Flemming[1]

In this issue of *BMC*, we offer you two articles about the use of "palm pilots" (i.e., PDAs, personal digital assistants, handheld computers) in health care. Koufogiannakis and McGowan and colleagues share their valuable experience with PDAs in both the academic and clinical settings. These articles make contributions which advance our collective knowledge frontier and enrich our experience of information technology (IT). At the moment, PDAs represent the leading edge of IT in health care and the "leading edge" is not synonymous with the 'bleeding edge'. PDAs offer health sciences librarians, both personally and professionally, an opportunity to ride the IT bandwagon to the glorious end of the parade! All we have to do is to get on and hang on. Already, medicine seems to have determined that the PDA is a device which has magnificent potential.

The PDA offers convenience computing and portability by releasing you from the tether of the desktop, fulfilling the promise of being a true "vade mecum" in electronic format. Where you go, it will go too. No computer before has been so companionable, so available in all situations, so like the little books carried by scholars through the centuries for reference and writing things down. Handheld computing puts functionality and electronic storage space previously only available on your PC (or on a relatively larger and heavier portable) into your pocket, and frees you to use the power of electronic communication in ways never before possible. Now you can go comfortably to a meeting with your computer, take notes, consult electronic documents on your PDA, send messages from the meeting (if you have a wireless connection) and escape on time (if you set an alarm in advance to warn you of the proximity of your next appointment). You can use your PDA to overcome middle age "short-term memory" problems; just set alarms (either silent or audible) to remind you of the dates and events you might be in danger of otherwise forgetting. You can schedule your work, record your expenses, keep addresses, and create "to do" lists in your PDA on the fly. If you are kept waiting for anything, as long as you have your PDA and have downloaded that new novel (oops! I mean, that important report you need to read) to your PDA, you can always use your waiting time productively.

The ability to create a bibliographic search on your PDA, which will be performed as soon as your handheld is synchronized with an Internet-capable desktop computer, is a reality. Citations retrieved in such a search can be downloaded to your PDA, which makes picking things up in the stacks a breeze. You can take the list with you, without printing it, and read the abstracts that were downloaded. Sooner or later, somebody is bound to create library-oriented applications, such as tools that permit you to download information from your library catalogue and carry it to the stacks to annotate what you find there. The convenience of having your notes in electronic format which can be copied directly into a word processing programme is routine now. Not remarkable, just what you can expect.

Handheld computing can also make your life outside the library easier. PDAs are not only for doctors and medical students who buy and store the essential medical texts so they can consult them at the bedside or in the Emergency Department. You can take your PDA with you on your travels as you accomplish all those mundane and easily forgotten chores and errands that keep your life on track. Little applications such as shopping lists, expense accounts, aids to balancing your chequebook, clocks that show time in several different countries, programmes that convert speed, distance, mass and currencies from one unit to another are all available for the palm pilot. Many can be downloaded from the Internet free of charge or, as inexpensive shareware.

But don't get too comfortable with today's PDA. It isn't the last word in convenience computing; it is merely what we have to work with at the moment. "Convergence" is one of the hot, new concepts in the information world. It suggests the blurring of distinctions between all kinds of things: tasks, values, professions, even information devices. "Digital convergence" is the ability of computers to fuse, transmit and display things that were formerly separate (such as voice, text data, and both still and moving images). In addition, cell phones and wireless e-mail devices are being integrated and storage capacity, memory and even function are being enhanced all the time. If PDAs can display moving images as well as store and play sound programmes now, how long will it be before these functions and more are available on a single, pocket-size unit that is much more powerful than anything we have even dreamed of today?

Palm currently has no wireless network and offers no wireless service in Canada, but in the U.S. where such service is available, it is still expensive. Charges for wireless service for your Palm in the U.S. are currently

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in the range of $20 to $40 (US) per month. Most librarians are probably not yet ready to pay for that kind of service. I have no doubt that the day is not far off when wireless service for the Palm will be available in Canada at reasonable cost and we will all want such marvelous convenience as is only now foreshadowed by the PDA. Handheld computing, today in its infancy, is going places you will want to follow very, very quickly, as a

health sciences librarian. Doctors in your institution are probably showing you the way now, but soon, others will expect you to be able to lead them where the doctors have gone. Don't miss the boat on this one! Get on the band-wagon, both personally and professionally, and with your PDA held high, lead whomever will follow into the promised land of convenient computing and wireless electronic information. •

Author Information

Tom Flemming Tom Flemming has been a health sciences librarian for nearly 28 years, first in Halifax and now in Hamilton. He has published and taught courses for health sciences librarians and students. He regularly provides service at the information desk in an academic health sciences centre. He maintains the *Health Care Information Resources* Web site for patients, their families, friends and health care workers <*http://www-hsl.mcmaster.ca/tomflem/top.html*>. He uses an early PDA, the Palm IIIxe, and is saving his pennies for an upgrade to a newer model.

The Mazankowski Report

http://www2.gov.ab.ca/home/health_first/

Presented by Alberta's minister of Health, the Right Honourable Don Mazankowski, *A framework for reform : a report from the Premier's Advisory Council on Health* made waves in light of the ongoing investigation on health care reform by the Romanow Commission created by the Federal government. The report has been dubbed *The Mazankowski Report* – to view the **Report**, see the above link.

A New Discussion Group from the Medical Library Association

http://groups.yahoo.com/group/imesig

A new discussion group has been created from the Information Management Education Special Interest Group (IMESIG) of the Public Services section of the MLA. This group discusses issues concerning education of library users and the development of librarians as teachers. To subscribe to this discussion group, first register with Yahoo Groups (if not already done so) and then go the above address and click on "Join this Group!".

Personal Digital Assistants at the John W. Scott Health Sciences Library
Pocketing a New Medium

Denise Koufogiannakis[1], Sandra Shores, Mark Roesner

Background

Joining a number of libraries across North America, the John W. Scott Health Sciences Library at the University of Alberta has begun offering services for users of personal digital assistants (PDAs) and is exploring opportunities for expansion. PDAs offer clinicians a reliable, easy to use device for accessing and exchanging knowledge resources and patient information, in addition to the traditional features of tracking appointments and contacts. The library has an important role to play in supporting the use of PDAs for evidence-based learning and practice.

In the summer of 2001, one of the authors developed a Web site of PDA resources for health care professionals <http://www.library.ualberta.ca/subject/pdas/>. This site originated from residents' requests for evidence-based medicine calculator Web sites that could be downloaded to their PDAs. The site started out small, but has grown and changed enormously over the past six months. At about the same time, a small group of librarians on campus who are PDA users wanted to move beyond merely hosting a Web site toward using their skills as librarians to offer an array of services to users.

During a discussion among interested Library staff, one person asked, "Why don't you offer a class about PDAs for faculty, residents and students and see what happens?" Thus, in October 2001, the authors held their first training session for health care professionals, entitled *Making the most of your PDA*. This was intended to be a one-time session given in the hope of gaining feedback from Scott Library users regarding what they wanted the library to offer in terms of PDA support.

The PDA Training Sessions

The first training session was held in October 2001 and attracted eleven people from a wide range of disciplines, including medicine, nursing and pharmacy. The authors thought the turnout was adequate and the response to the session was quite favourable. The sessions might have stopped there if not for the significant number of requests for other sessions. In late November, a session was held solely for residents, at the request of the Postgraduate Medical Education office. Twenty-four signed up for this session but only 8 attended. The authors were not discouraged however, since we know that residents juggle very busy schedules, and those that did attend were very positive about the session. In January 2002, another open session was held for anyone wanting to attend. This session had 31 attendees (several people must have received PDAs for Christmas presents!), and resulted in an overflowing computer lab and a number of people on a waiting list. As a result, another session was offered in February, with good attendance. The authors are currently planning another session for undergraduate medical students at the request of the students themselves.

The PDA sessions held to date have included a mix of people with a wide range of PDA experience; the authors have tried to mirror this mix in the content of the sessions. The one-hour sessions begin by covering some basics about the current handheld market and guidelines for buying a PDA, targeting those whom attend primarily because they are about to make a purchase. Next, the main functions of all PDA devices are illustrated: the Date Book, Address Book, Memo Pad and To Do List. Using emulator software on the presentation PC <http://www.palmos.com/dev/tools/emulator/>, a live image of a PDA is projected onto a screen so that the primary functions and tips for improving functionality of the device can be demonstrated to participants. The authors use a Palm OS emulator because of the current dominance of the Palm operating system among PDA users in health care. The Palm m505 model ROM is used since it is the most recent model and because it is in colour, some of the new colour features can be shown. Finally, using the Scott Library's PDA Web site as a starting point, the types of software, tools and some of the texts available for health care professionals are reviewed. When possible, the resources are demonstrated via the emulator, or a Web site such as AvantGo <http://avantgo.com/frontdoor/index.html> is used to demonstrate how some resources can be customized and the content synchronized to individual PDAs. In all of the training and information sessions, the participants make valuable contributions to the discussion and further the authors' own knowledge of this rapidly changing medium.

In addition to sessions for health care students and practitioners, the authors have offered several seminars for librarians. For example, a session was given for library staff on the University of Alberta campus. The authors were also asked to give a session for members of the Northern Alberta Health Libraries Association (NAHLA). The content was slightly changed in order to address librarians, but was otherwise similar to the sessions given to health care professionals. The response from library staff has been positive, with high attendance, lots of questions and positive feedback. Our group has also had a number of requests to do introductory conference sessions or give short consultations on hardware, programs or best practices tips so that users can make the best use of their device.

Feedback

Since the goal of the sessions was to gain feedback from PDA users about the direction they would like the University of Alberta Libraries to take with regard to these de-

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vices, one-page questionnaires were incorporated into each session (see **Appendix A**). To date, sixty-one people have attended the four sessions offered for students and practitioners. A total of 45 questionnaires were returned, giving a response rate of 74%.

When asked if the session met their expectations, 73% of attendees felt the session was "just right," while 16% felt it was "too basic" and 4% thought it was "too advanced." These results reflect the mixed levels of PDA knowledge among those attending the sessions. In talking with attendees following the sessions, the authors received feedback that the session held something for everyone, regardless of skill level. However, the PDA training may be restructured to provide basic and advanced sessions.

> *PDAs offer clinicians a reliable, easy to use device for accessing and exchanging knowledge resources and patient information, in addition to the traditional features of tracking appointments and contacts.*

Respondents indicated that knowledge of the PDA resources listed on the Library's Web site <*http://www.library.ualberta.ca/subject/pdas/*> was the most useful thing they had learned from the session, with 63% noting the Web site and its resources as valuable. Information on basic features of the Palm was the next most noted (18%) and AvantGo was mentioned as the most useful thing learned by 15% of respondents. It was of interest to the authors that very few people attending the sessions had ever heard of AvantGo, let alone used it, although it is a very popular PDA product. Demonstrating AvantGo was certainly one of the highlights of the session. People were thrilled to learn of medical channels, as well as fun things like the FilmCan channel!

Most attendees did not respond to question 3 asking them what issues they would have liked to see addressed in the session. Those that did respond had very specific needs such as: how to use an expansion card, programming, limitations of different models and the use of specific applications. Some of the early suggestions for information comparing PDA brands before purchasing were incorporated, and the authors feel that the other specific recommendations would lend themselves well to a more advanced PDA session. Some brief one-on-one consultations were also booked with the authors to help attendees with specific questions about using resources on their PDAs.

With the exception of two questionnaires that had no response, all respondents answered "yes" to question 4, "Should the Library offer this type of session again in the future?" This response has given the authors the fortitude to keep moving ahead! When asked the open-ended question, "How can the Library enhance your PDA use?," attendees offered a variety of responses. The most common responses were to keep the Web site running and updated (27%), provide licensed resources such as medical books and journals (23%), continue to offer instructional sessions (12%), offer advanced courses (12%), provide reference help (12%) and offer follow-up consultations (12%).

When asked, "Which of the following Library materials would you like to be able to download to your PDA?," 73% of questionnaire respondents indicated that they want database search results. Forty-two per cent indicated they would like to download catalogue search results, while 24% expressed an interest in Library's Web site resource guides. Only 13% wanted to download the Library hours onto their PDA. Other suggestions mentioned were pdf (Adobe Acrobat) documents and texts.

Seventy-eight per cent of respondents indicated they would like the Library to provide PDA training/information sessions. They also supported having a Web site with listings of PDA resources (73%) and consultations regarding PDA resources (67%). Other choices included 'hotsyncing' capabilities (56%), loaning of PDA books (49%), supporting an AvantGo channel for Library news and information (47%), and providing an infrared beaming station to download information to PDAs (44%). These responses reinforced the direction in which the authors were already moving and indicated that these users were satisfied with the training sessions, Web site and consultations offered. Many users were not aware of the possibility of offering PDA materials for download via 'syncing' (synchronizing) or beaming from the Library, which could be a reason for the lower positive response rate to those items.

Finally, the vast majority of those attending the sessions were Palm OS users (80% in total). Attendees had Palm, Visor (Handspring) and Sony brands, with the Palm definitely being the favourite brand. Only one person was a PocketPC OS user, and the remaining 18% were undecided. Most people had not downloaded any software programs from the Internet to their PDA. Those who had were considered advanced users. Among that group, ePocrates, the drug handbook application, was the most widely downloaded product. The sessions were a good opportunity to highlight some of the problems of using ePocrates as an information source and a good vehicle to get the users thinking about how to critically evaluate the information available to PDA health care users. Other products attendees had downloaded included MedRules, MedCalc, AvantGo, Adobe Acrobat reader (pdf files), Vindigo, Documents to Go, iSilo and the Washington Manual.

The feedback from our user community has been invaluable in validating the direction the authors have taken to support the use of PDAs as an information tool in health care practice and education. It has convinced the authors to move forward quickly in this rapidly changing and expanding environment.

The Future

The Scott Library's short-term goal is to purchase an institutional license for one or more health care resources within the upcoming budget year and provide a station for synchronizing/beaming to users' PDAs within the Library's network. The Library currently has a practicum student from the School of Library and Information Studies at the University of Alberta who also works in the Library's IT department and owns a Palm. One of his projects is to investigate available options and make recommendations

about resources, hardware and software for the upcoming purchase. In the longer term, the authors expect to increase the number of resources the Library offers to PDA users and to work with other campus libraries as they move into this format. Whether the Library should be offering some of its own content in a PDA compati-

ble format, through a service such as AvantGo, or as downloadable documents through the synchronizing station is also being considered. Finally, the authors expect the training sessions to continue for some time and eventually to be moved into the content that is offered each fall to all incoming health sciences students.   ◆

Appendix A: Feedback Questionnaire

University of Alberta Libraries

Feedback Questionnaire
Course: Making the Most of your PDA/Palm
Instructors: Denise Koufogiannakis and Sandra Shores
Date: February 6, 2002

1. Did this session meet your expectations? **too advanced**_____ **just right** _____ **too basic** _____

2. What was the most useful thing you learned?

3. What other issues would you have liked us to cover that were not addressed?

4. Should the Library offer this type of session again in the future? **Yes**_____ **No**_____

5. How can the Library enhance your PDA use?

6. Which of the following Library materials would you like to be able to download to your PDA? (please check as many as apply)
   _____ library hours
   _____ NEOS Libraries Catalogue search results (library holdings)
   _____ database search results (journal article citations)
   _____ Library Web site resource guides (ie: CATwalk, handouts)
   _____ other (please elaborate) _____

7. Which of the following PDA services would you like the Library to provide? (please check as many as apply)
   _____ loaning of PDA books
   _____ hotsyncing capabilities
   _____ infrared beaming station
   _____ PDA training/information sessions
   _____ consultations re: PDA resources
   _____ supporting an AvantGo channel for library news and information
   _____ supporting a Web site with listings of PDA resources
   _____ other (please elaborate) _____

8. What brand of PDA do you own or plan to buy?
   _____ Palm
   _____ Visor
   _____ Pocket PC
   _____ Sony
   _____ other (please elaborate) _____
   _____ undecided

9. What software programs have you downloaded from the Internet onto your PDA?

Thank you for completing the questionnaire!

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Medical and Health Applications for PDAs

Jessie McGowan[1], Michael Sidlofsky

Introduction

Personal digital assistants (PDAs), also known as handheld computers, have made information management and data transfer more convenient than could have been imagined a few years ago. A number of professionals in health care, as in other fields, are taking advantage of freeware, shareware and commercial applications for handhelds. Health sciences librarians may not currently need to use available applications themselves, but given the popularity of handhelds among health care professionals and students, and the growing role of the librarian in clinical and decision support teams [1], it is wise for them to become familiar with handhelds and their use in medicine. This article provides a selective survey of health-related PDA software, analyzes issues and concerns regarding privacy and security, and examines some current PDA initiatives at health sciences libraries and in medical informatics departments.

Software

The two leading handheld products are the Palm Pilot, or Palm, which uses the Palm Operating System (OS), and Microsoft's Pocket PC, which uses the Windows CE operating system. Both are available in several models. Since the Palm is currently the more popular of the two products, most medical software is designed for the Palm OS; however, where applications are available for Windows CE this will be noted.

Clinical reference texts are a natural choice for conversion to handheld format. Abith <www.abith.com> sells the *Interactive medical handbooks* series of reference guides (Palm OS only) in sixteen areas of practice. Handheldmed <www.handheldmed.com> sells a number of standard works in general and specialty medicine, such as the *Merck manual*, *Harrison's Principles of internal medicine* and *De-Gowin & DeGowin's Diagnostic examination*. Skyscape <www.skyscape.com> is another leading commercial provider, offering such texts as FerriGuide, a proprietary electronic version of *Ferri's Practical guide to the care of the medical patient*. Some reference works, such as: *Griffith's 5-minute clinical consult* and *Taber's Cyclopedic medical dictionary* are available from multiple sellers. Particularly commendable are Handheldmed's and Skyscape's efforts to provide up-to-date editions and to support both Palm OS and Windows CE.

For drug reference, a popular tool is ePocrates <www.epocrates.com>, a free, Palm-only database with the added capacity for the user to annotate drug entries (registration required). Regular updates are available. Skyscape's A2z-Drugs <www.skyscape.com/productsa2zdrugs.htm>, a commercial program with a free demo, provides a good deal of information that ePocrates lacks (such as mechanisms of action); it is available for both Palm OS and Windows CE.

Diagnostic calculators are available for a variety of general and specialty-specific needs. MedMath <www.stanford.edu/~pmcheng/medmath>, a free program for the Palm, calculates 28 commonly used equations, such as: body mass index and number needed to treat. Thenar's PregCalc (www.thenar.com/pregcalc) is a commercial Palm-based obstetrics and gynecology application available in professional, patient and site-licensed versions. Hopefully, other medical handheld applications will follow suit. Of particular use for evidence-based research is EBM Calculator <www.cebm.utoronto.ca/medicine/ebm/palm/ebmcalc>, a freeware Palm program from the Centre for Evidence-Based Medicine at Mount Sinai Hospital, University Health Network, in Toronto. This tool calculates statistics for randomized controlled trials (RCTs), as well as for diagnostic, prospective and case-control studies.

Patient management applications are another popular form of PDA software. The commercial ePhysician Practice suite for the Palm <www.ephysician.com> allows physicians to schedule appointments online, send prescriptions to pharmacies and track billing information. PdaMD's Patient Keeper <www.pdamed.com>, another commercial program for Palm OS, enables users to prioritize and classify patient problems, track patients' medication courses and create to-do lists for patient-related tasks. Handheldmed's Patient Tracker, a freeware application for Windows CE, permits note-taking for such data as vital signs and test results, and prints to any printer which conforms to the IrDA standard for wireless printing. Although handheld patient management tools are potentially useful, there are issues of data privacy and security to consider, as discussed below.

With regard to current awareness services, there are comparatively few options. The good news is that these are less expensive than other types of handheld applications. At present, providers of medical tables of contents and abstracts use AvantGo (www.avantgo.com), a free Internet service provider for registered users of the Palm and Pocket PC. Specifically, this service provides personalized e-content services or 'channels' through synchronization with a desktop computer. Handheldmed and Journal-ToGo <www.journaltogo.com> are the two major public providers of this service; both offer free subscriptions to abstracts from several medical journals, and JournalToGo provides selected Reuters news articles as well. A number of university libraries offer a much larger selection of titles to affiliated users.

For full-text journal articles, there is currently only one option: Ovid's recently introduced Ovid@Hand <www.ovid.com/products/hand/index.cfm>. This product allows the

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user to create a personal library of journals available through Ovid, generate database searches, and retrieve tables of contents, abstracts and full text. As with other Ovid products, this application is better suited for library subscription than for individual purchase. See **Table 1**.

Issues and Concerns

One of the main limitations to having libraries support and collect material for PDAs is budgetary. Even if libraries can spend part of their collection budget on PDA textbooks or want to add PDA compatible pages to their Web sites, they still need to deal with the cost of training library staff to use PDAs and to supply these individuals with their own devices.

With any technology, the issues of security and privacy need to be addressed. When PDAs were first developed, in the mid-1990s, they were conceived as a product to link a user to the computer desktop when the user was away from the computer. The design of a small, pocket-sized device allowed much of the functionality of the device to be focused on personal applications (like address and date books. PDAs were not designed specifically as tools for medicine. Thus, the privacy and security that are required around patient records are still issues that need to be addressed with this technology.

Many physicians want to use their handheld devices to maintain patient records but what happens if a PDA is lost or stolen? Because of the small size and portable nature of these devices, handhelds are easy to lose and easy to steal.

Losing information that is merely user specific (i.e., address book, date book) is unfortunate. However, losing a device that is connected to a corporate wireless network containing highly confidential information such as patient records can be disastrous, and raises many legal and ethical issues. To address the many issues of electronic patient records, The United States Congress recently enacted a ***Health Insurance Portability and Accountability Act*** [2]. Canada does not have an act; however, The Office of Health and the Information Highway, Health Canada, has produced a document entittled ***Toward electronic health records*** [3].

Once a PDA goes missing, it is not difficult for the finder to get access to its contents. While many PDAs have some form of password-based access, there are limited options for additional authentication and most models that use password-based access use encrypted access, not encoded [4]. This means that an attacker who accesses the encoded block could determine a password if it uses a known algorithm. Unfortunately, most PDAs do not have enough processing power to enable a more secure authentication or encryption application. One option for PDAs with enough power and memory is to increase the password security with specialized software. There are several companies that have developed software that encrypts (i. e., scrambles) the information stored on Palm devices (see **Appendix A**). To decrypt the information, the user enters a password. When the device is turned off, it automatically re-encrypts. It is expected that as medical uses are developed for PDAs, solutions to security issues will be researched and developed.

Table 1. Some Providers of Health-related PDA Applications

Name	URL	Available for Palm OS	Available for Windows CE	Subject Coverage	Specific Products
Handheldmed	www.handheldmed.com	Yes	Yes	Drugs, medical reference, patient management, current awareness	Merck Manual, Harrison's, Patient Tracker
Skyscape	www.skyscape.com	Yes	Yes	Drugs, medical reference	FerriGuide, Taber's Cyclopedic, A2zDrugs
Thenar	www.thenar.com	Yes	No	Diagnostic tools	PregCalc
PdaMD	www.pdamed.com	Yes	No	Patient management	Patient Keeper
JournalToGo	www.journaltogo.com	Yes	Yes	Current awareness	JournalToGo
Ovid	www.ovid.com	Yes	Yes	Full-text journals	Ovid@Hand

Current Health Library Initiatives

As PDA technology develops in medicine and other health disciplines, health libraries will need to adapt the way that they do business. Many libraries have already developed extensive lists of resources, software and hardware for PDA users. Some offer workshops and courses included in the curriculum on the use of PDAs. Some even have access to textbooks (such as *Harrison's Principles of internal medicine, Merck manual*, etc.). As well, other libraries are organizing their Web sites to facilitate access to services such as <http://www.handheldmed.com> that offer tables of contents and abstract services to recent journals (i.e., *Annals of Internal Medicine* and *BMJ*).

Good examples of Internet guides that provide selective resources for PDAs are available from the John W. Scott Health Sciences Library at the University of Alberta Libraries <http://www.library.ualberta.ca/subject/pdas> and the Medical Library Services of the College of Physicians & Surgeons of British Columbia <http://www.mls.cps.bc.ca/links/pda.htm>. At the Saskatchewan Institute of Applied Science and Technology (SIAST), Wascana Campus Library in Regina, there is a pilot project where PDAs will be loaned to members in the Emergency Healthcare Program. The Arizona Health Sciences Library Web site at the University of Arizona <http://educ.ahsl.arizona.edu/pda/index.htm> provides extensive PDA information. For the health sciences librarian, they provide information about PDA initiatives in health care libraries in the U.S., as well as a bibliography of PDA articles in the health care literature. At the time of writing this article, there were approximately 485 citations in the bibliography on this site. In a recent article in *Reference Services Review*, Shipman and Morton provide a good overview of PDAs and examples of health care and library services in the U.S. [5].

The growing number of applications for PDAs can facilitate many aspects of clinical practice for health professionals and create new service opportunities for health sciences libraries, provided that health practitioners and information professionals are mindful of the relevant budgetary, security and privacy considerations. ◆

Appendix A. Selected list of PDA Security Software

Certicom's movianCrypt *<www.certicom.com>*. A full-featured file encryption application.

F-Secure's FileCrypto *<www.f-secure.com>*. A full-featured file encryption application.

IS/Complete's Restrictor *<www.iscomplete.com>*. This Product allows an administrator to create profile categories for different users as well as a default profile, on a single PDA.

Tranzoa's OnlyMe *<www.tranzoa.com>*. This product extends limited password functions to include button taps and other 'gestures,' rather than just letters and numbers.

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Loansome Doc or Loansome Dud?
A Library's Experience Implementing Loansome Doc

Robert Janke[1]

Abstract

Many libraries cite concern that implementing Loansome Doc will drastically increase their workload. Loansome Doc is an adjunctive PubMed feature which enables patrons to order documents directly and electronically from participating libraries. To measure the impact of Loansome Doc implementation, the document delivery statistics from the Library at the Canadian Science Centre for Human and Animal Health (CSCHAH) were analyzed. The first year using Loansome Doc (2001) was compared to the year prior to implementation (2000). It was found that Loansome Doc contributed to a 47.6% increase in document delivery requests. The literature is also reviewed and alternative reasons for the increase are advanced. The problematic questions of what to do with requests for items held in-house if you are serving a localized client base are also discussed.

Introduction

The Canadian Science Centre for Human and Animal Health (CSCHAH) in Winnipeg, Manitoba, is the first facility in the world designed to accommodate both human and animal health laboratories in one location. The pioneers in this unique partnership are the Canadian Food Inspection Agency's National Centre for Foreign Animal Disease and Health Canada's National Microbiology Laboratory. This government-funded facility is also unique in that it contains Canada's only Biosafety Level 4 laboratory in which the world's most virulent organisms can be studied—a capability that only a handful of countries possess. As part of such a dynamic and innovative centre, the Library continuously strives to integrate new technological developments as a means to better serve its client's needs.

In the past couple of years, the author has noticed a growing popularity among clients for PubMed over the Library's subscription based interface to MEDLINE via SilverPlatter. The preference for PubMed should come as no surprise to health care librarians. Henner, for instance, found in a survey of medical libraries that 68% of end-users were searching PubMed [1]. Given that more and more of our clients are using this free Web-based interface to MEDLINE, it made sense to further investigate some of its attractive adjunctive features such as Loansome Doc.

From the patron's perspective, the next best thing to accessing full-text articles online is to order the full-text with little effort and have access to the article as quickly as possible. To a large degree, Loansome Doc facilitates this procurement, acting

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as an intermediary, or agent, between libraries and their users. Or, according to Fishel, it becomes almost as easy as pushing a button get a document [2]. With Loansome Doc, registered users can order documents directly from the library through an active PubMed session while searching on- or off-site.

There is plenty of literature explaining the history and the implementation of Loansome Doc in conjunction with outreach services [3, 4, 5], but little in the way of gauging the impact on workload at any specific library. In the end, research by Paden et al. comes closest to detailing the effect of Loansome Doc on interlibrary loan (ILL) activity [6]. One wonders, however, how accurate the survey responses from the 72 Loansome Doc using libraries in their sample were. Indeed, the reader must infer the degree of rigorousness with which respondents checked the appropriate box, which indicated, either negatively or positively, the effect on ILL activity expressed in percentiles. Paden et al. reported that only 28 of the 72 libraries experienced a change in document delivery patterns. Of these 28, 16 or 57% of libraries, indicated the impact to be 10% or less. They went on to conclude that "[t]he results indicate that providing Loansome Doc does not significantly overburden libraries with requests" [7].

There has only been one other study which has made an attempt at quantifying the effects of instituting Loansome Doc. Lovas actually describes the origins of Loansome Doc and the results of its beta testing [8]. It must be noted that Lovas's results were drawn from a system-wide analysis and are difficult to generalize to the individual library level. She does, however, conclude that "[a]lthough there appears to be a steady increase in the number of Loansome Doc users and the number of documents requested, surveys seem to indicate no excessive or overwhelming usage" [9].

Why are these studies focusing on workload? In most studies, the hypothesized effect on workload was the number one reason libraries used in rationalizing their avoidance of implementing Loansome Doc. Hence, this paper will seek to uncover the precise effects of Loansome Doc on document delivery statistics, and hopefully, assuage fears about implementing this system.

Before Loansome Doc

Prior to January 2001, before Loansome Doc, the Library at the Canadian Science Centre for Human and Animal Health did as many libraries probably do; clients were instructed to fill out ILL forms, one form per request. There is no doubt that this method had its advantages: library staff were able to review most of the hand written citations on the spot and point out common omissions of page and issue numbers. It also made for a key instructional moment in that librarians could educate patrons about which journals were in-house or available online. This was particularly useful when a scientist or research assistant failed to consult the

catalogue or holdings lists (print and electronic) prior to making a request. Of course, the system begins to break down when individuals have too many requests or are trying to make requests after hours. Hence, when there was a large volume, the Library would accept database printouts or photocopies of bibliographies with the desired citations highlighted.

Implementing Loansome Doc

"Oh how we'll miss your smiling faces" is how this author marketed the implementation of Loansome Doc in a laboratory-wide e-mail. The focus of the e-mail was to educate scientists that they would be able to order documents through the Library using Loansome Doc. Whether in their offices, in containment, or at home, searching PubMed meant that they were now only steps away from telling the Library what they wanted.

From our end, we certainly knew that Loansome Doc would be a great step towards simplifying and expediting document delivery. Loansome Doc requests would all be pre-verified, that is, they would come to us as precise and reliable PubMed citations attached to the client's registration information (name, address, e-mail, etc.). There would be no more difficult-to-decipher, error-filled, handwritten requests. Moreover, and probably just as important, is the fact that Loansome Doc requests can seamlessly be forwarded to other DOCLINE participating libraries. Hence, we would no longer have to re-key

information to order documents from other institutions. Together, rather than increasing workload, these time saving Loansome Doc measures actually gave the impression that there would be less time spent processing document delivery requests even if, as the literature suggests, there would be a modest increase in overall activity.

A Shift in the Workload

Being able to compare a year without Loansome Doc (2000) to a year with (2001) provides some interesting insight into its effects. Without doubt, there was an increase in document delivery requests; **Figure 1**, which compares monthly totals, illustrates the effect. Indeed, the only month in which the pre-Loansome Doc figures were lower than regular ILLs was February.

Quite interesting, and somewhat of concern to those pondering implementing Loansome Doc, are the contents of **Figure 2**. It not only reconfigures the content of **Figure 1** into a longitudinal graph, but also splits document delivery requests into those that were forwarded on to other libraries and those that were completed by Library staff in-house. This latter category represented requests for items that were held in our collection for which we either pulled the desired issue and had the patron photocopy, or printed it off if it was available electronically.

The proportion of requests filled in-house can also be explained in **Figures 3 and 4**. Although our total document

Figure 1. Year to year document delivery comparisons broken down by month
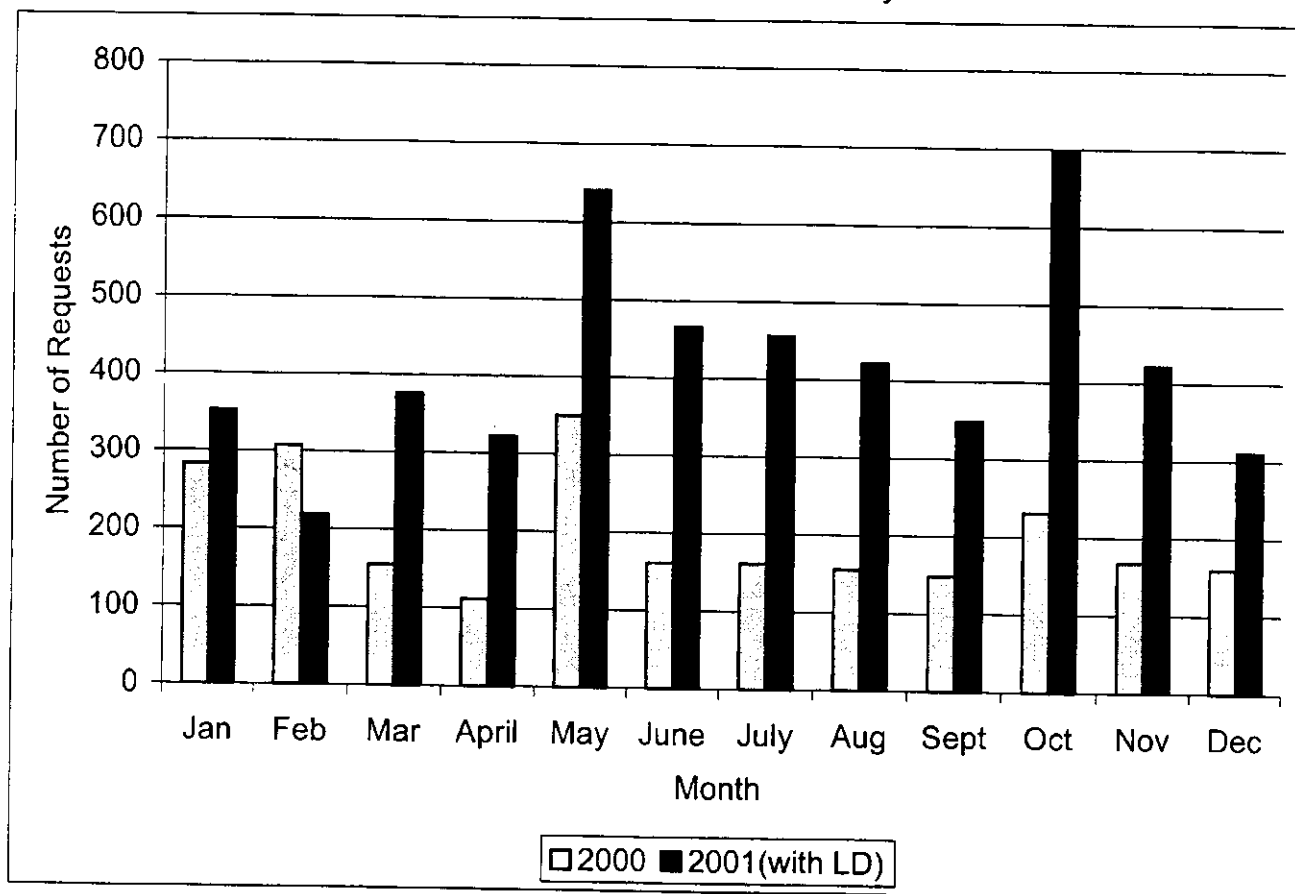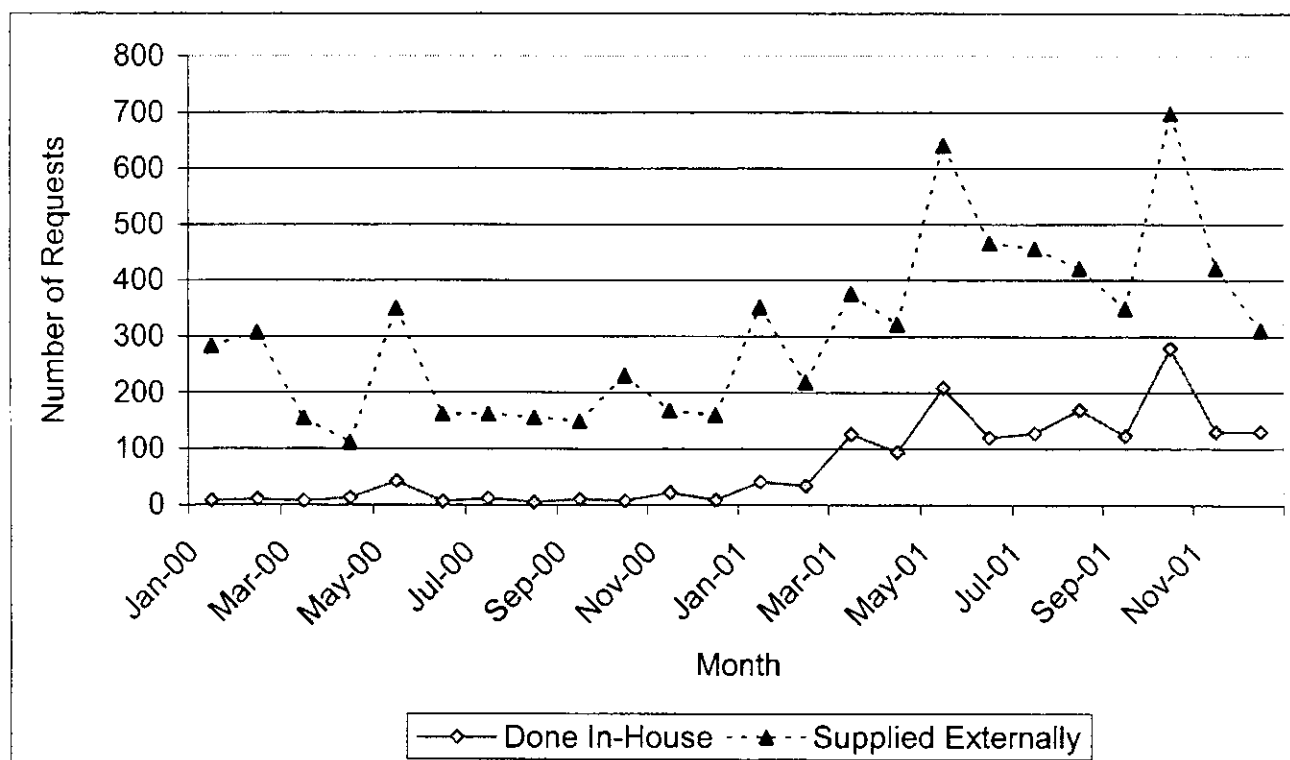
Figure 2. Monthly document delivery statistics, January 2000 to December 2001

delivery requests jumped from 2395 in 2000, to 5036 in 2001 (an increase of 47.6%), more startling is the increase in the proportion of requests filled in-house. In 2000, only 6.4% (152/2395) of our requests were filled in-house whereas 2001 witnessed an in-house fulfilment rate of 31.5% (1584/5036). Undoubtedly, this shift in workload from our patrons to Library staff represents an important issue that must be addressed prior to implementing LoansomeDoc.

Discussion

Returning to the shift in workload issue, the author feels that this is one area where LoansomeDoc can be improved. Currently, requesters are told which titles are held in the library only after orders have been sent to the Library. This is done by comparing the titles and dates requested to the titles held in the Library (with which the client had previously signed on), as entered in SERHOLD on DOCLINE. This handy holdings-checking feature should be made available to Loansome Doc clients prior to the actual submission of the requests. Moreover, Loansome Doc libraries should have the option of being able to inform clients as they are making requests that it is not (or is) their policy to fill requests for items held in-house. Ideally, this would occur as requests are submitted. Then, these submitted requests would be split into two lists. The first would be the requests for which they must go to the Library to retrieve, while the second would be the list of interlibrary loan requests. This later prompting could also be accompanied by an informa-

tive note on the inevitable delays of traditional ILL services. In the end, this change would also better suit libraries wanting to offer the Loansome Doc feature to clients who work in close proximity to the Library.

If the Library were unable to fill Loansome Doc requests for in-house items, then after requests are downloaded, they could notify the patron that their in-house requests have been put aside and that they will need to fill them. In the opinion of this author, this is the least desirable option. And, from our point of view, implementing Loansome Doc and the substantial improvement in our service that it brought, more than justified the increase in our local workload. Although the CSCHAH Library has only two staff, using these concrete document delivery statistics, we are in a substantially better position to request additional staff and funding. Indeed, what other businesses fear an increase in the demand for their goods? In answer, fear is certainly justifiable in those cases where an increase in demand, for whatever reasons, cannot be used to leverage more funding for additional staff or increased staff hours.

Even with the fairly conclusive results of this study, the CSCHAH cannot say with absolute certainty that implementing Loansome Doc directly caused the increase in the document delivery requests. There were a number of possible confounding variables, among them the horrendous events of September that caused a marked increase in requests for information on possible agents of bioterrorism from the Special Bacteriology section. Moreover, the scientists at the centre, under the direction of a new Scientific Director, were encouraged to

Figure 3. Document delivery requests, year 2000 (n=2395)

■Done In-House (n=152) □Supplied Externally (n=2243)
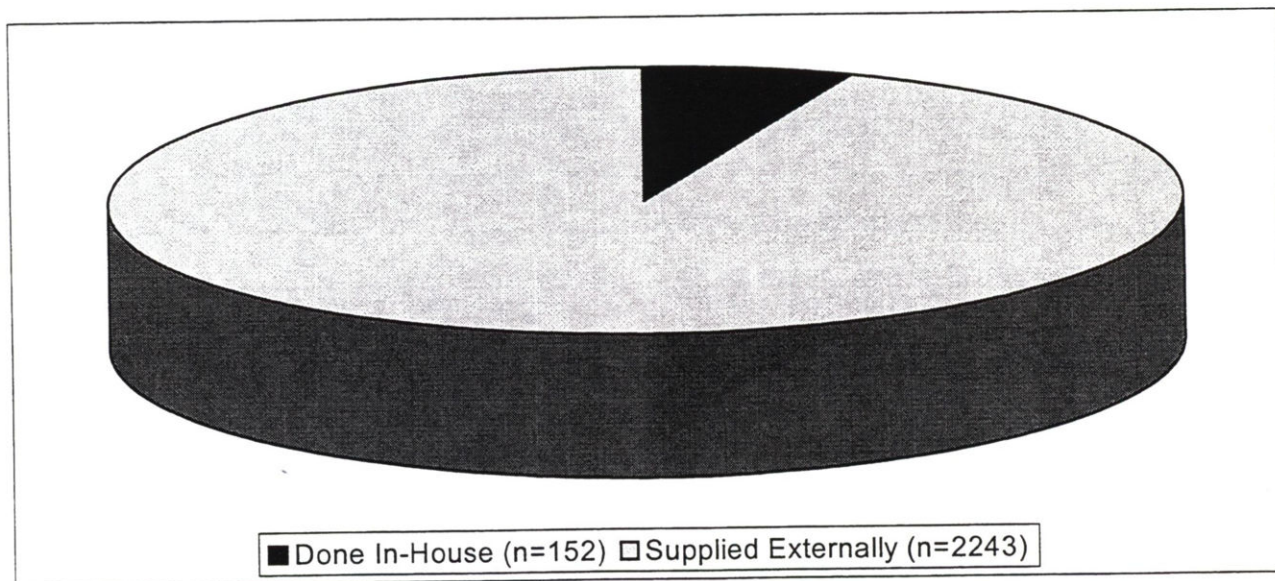
Figure 4. Document delivery requests, year 2001 (n=5036)

■Done In-House (n=1584) □Supplied Externally (n=3452)
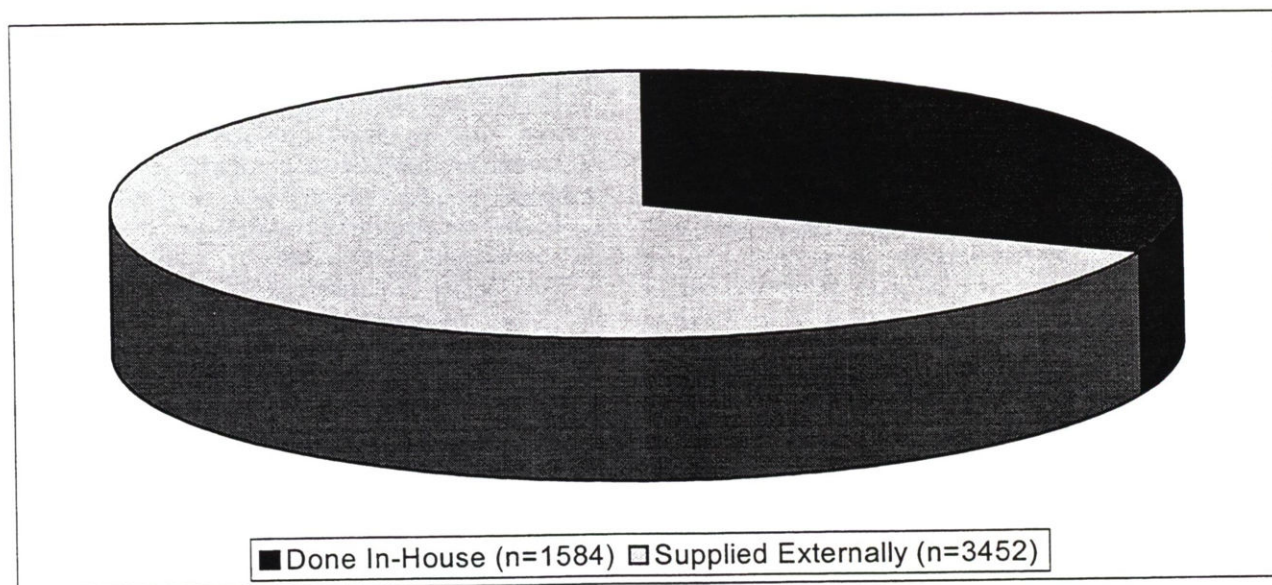
engage in more independent research. The exact effects of these mitigating circumstances on this current study can only be hypothesized. Although the number of requests experienced in October 2001 were uncharacteristic, without a deeper content analysis of the actual requests, one may only conjecture to the effects of the bioterrorism scare. As for the Directorly encouragement and support for our staff to branch out in their research endeavours, again it is difficult to assess how this effects the Library's document delivery in real terms.

To return to the literature, Paden et al. begin to formulate a theoretical framework which may serve to predict the degree of increase in interlibrary loan activity. They state: "[m]edical school libraries had the largest increase in interlibrary loan activities. A majority (63%)

indicated their interlibrary loan activity had increased 11% to 100%" [10]. They go on to contrast this with: "[m]ost teaching hospitals (75%) and hospital libraries (64%) had increases of less than 10%" [11]. Along this rough continuum, I would also add Special Libraries, a type that was under represented in their study, such as this one at the Canadian Science Centre for Human and Animal Health. Where the CSCHAH Library, and other 'specials' would fit in is a topic for further investigation. However, because of the research emphasis of their parent organizations, one could forecast that they would experience the heaviest increases following Loansome Doc implementation. If a sturdy and predictive framework is to emerge, then more research certainly needs to be done in this area.

Conclusion

At the onset, this was not intended to be a marketing article for Loansome Doc. However, take a moment to consider the profound impact that the Internet and other means of electronic communication have had upon libraries. This is not to say that these other means will put librarians out of work, but that our roles as information organizers and providers are shifting dramatically and we need to work on further inserting ourselves into our patron's information seeking and gathering processes. This feeling is echoed to a certain degree by Haricombe who writes: "[t]he challenge for libraries is to be sensitive to the changing needs [I would also add expectations] of their user population. More importantly, they also need to be flexible to make responsive changes to address those needs. Failure to do so may render the library irrelevant" [12].

Indeed, with all-in-one services such as Ingenta.com, ScientificWorld.com and PubList.com, the threat to libraries and librarians may be justifiable. These services provide everything from free news headlines, to free literature alerting, free databases to search and competitively priced desktop document delivery. Although Loansome Doc is by no means the panacea to his near reprimand of the profession's past inactivity, it certainly forms a positive and very attainable step. Peters writes: "[a]s professionals, we need to encourage the creation of information environments where the intellectually distinct tasks of identifying, locating, retrieving, interpreting, evaluating and applying information become virtually seamless and indistinguishable" [13].   ♦

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DOCLINE in Canada

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Evidence-based Librarianship
A Socratic Dialogue

Andrew Booth[1], Jonathan D. Eldredge

Introduction

With evidence-based librarianship (EBL) apparently set to assume centre stage in the concerns of the health information profession there is a need for the type of philosophical debates that did so much to help EBL's precursor, evidence-based medicine [EBM], in advancing to maturity [1, 2]. In the absence of erudite modern discussants to rehearse such important issues, we are fortunate to be able to eavesdrop on the debate between two ancient sages as they converse among the sacred groves of academe.

Building a Research Culture

SOCRATES: Greetings, Enthusiasticus. But why so gloomy? I thought that you had come back from the first pan-national symposium on Evidence-based Librarianship [3] brimming with optimism?

ENTHUSIASTICUS: Indeed I had, Socrates. But no sooner had I exhausted myself in clearing the backlog from my desk than four more projects clamoured for my immediate attention. How shall I ever find time to practice EBL?

SOCRATES: The proverb, "Time waits for no one" comes to mind. You describe a common scenario for today's librarian. Such an irony given that they spend so much of their waking time surrounded by evidence [4]! Could your predicament be resolved and your work rendered more effective if you were to give higher priority to the practise of EBL?

ENTHUSIASTICUS: I would hope so. Yet our mutual colleague, Routinus, has the ear of many librarians when he claims that there is no time for EBL. In fact, he states that our efforts are so much time wasted that we could better spend in working harder and for longer hours. And then others look to the god of thunder and loud noises, Technologicus for the solutions to our current problems.

SOCRATES: Let us not criticise Technologicus himself, but rather those who swear blind allegiance to him. Technology is simply a servant for the advancement of more noble ends.

ENTHUSIASTICUS: How perceptive, Socrates! EBL would never have become an international collaborative venture without the assistance of Technologicus! And recall how the seeds of this dialogue were sown in the ether when first we sat more than 5,000 miles apart!

SOCRATES: But does not Routinus recognize how that most far-reaching revolution, namely the Evidence-based

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movement, has been occurring all around us during the past decade?

ENTHUSIASTICUS: I agree that our old and dependable colleague, Routinus means well, but he regards experience, not research, as the only mentor. Perhaps he does not recognize how many biases are introduced through such selective and subjective recall? I suspect that he has no understanding of how the EBL process works and how it will affect most librarians.

SOCRATES: Indeed. For the majority of health sciences librarians, EBL simply needs be a different approach to decision making rather than an onerous additional duty.

ENTHUSIASTICUS: More than that, Socrates. Any librarian who aspires to practising EBL has only to start cultivating the art of recognising and then articulating EBL questions as they arise in a day-to-day work setting [5].

SOCRATES: Of course! Although let us not forget that our profession must also support those of our colleagues who conduct applied research as they stoke the forges that manufacture the evidence needed for us to make our decisions.

ENTHUSIASTICUS: To summarise then: EBL requires that practising librarians learn to articulate practice-focused questions, running the goddess Diana in their hunt for the needed evidence. They then use this evidence in making decisions, while not neglecting the need to replenish the supply of useful evidence by encouraging those librarian colleagues who have a penchant for conducting applied research.

SOCRATES: Yes indeed! A rational person realises that you need not cultivate crops or raise livestock to appreciate the food found in the marketplace. Similarly, most librarians simply need to be critical users of evidence produced by the one in 5, or perhaps even one in 10 of their colleagues who actually conduct the research.

ENTHUSIASTICUS: I do hope that our colleague, Routinus, will at least heed our promptings to learn more about EBL either through attending a workshop or a continuing education course, or by reading a few of the articles to which we refer.

SOCRATES: Once Routinus learns the true meaning of EBL I suspect his mind will become more open to the reality, rather than the fear, of EBL. Could it be that EBL's early adopters [6] have scared off their librarian colleagues with premature talk of systematic reviews, randomised controlled trials (RCT) and cohort studies?

ENTHUSIASTICUS: That may be so Socrates. One no more needs to be able to calculate the confidence intervals for an RCT to be an EBL librarian than a cordon bleu chef needs to grow all their own produce!

SOCRATES: And yet, my learned friend, managers need to create incentives so that those wishing to acquire and apply such skills can do so. Otherwise, there will never be enough high-quality evidence available for librarians.

ENTHUSIASTICUS: Do you suppose that such library managers might make a difference simply by beginning to ask their librarian colleagues, "Where's the evidence to support your claim?"?

SOCRATES: Has that not indeed been the stimulus for the entire Evidence-based movement? As we have said, the EBL process begins with a well-formulated question [5]. Which reminds me to ask you, Enthusiasticus, can it be true that health librarians have survived several decades of existence without ever having to think about the quality of the evidence that they supply?

ENTHUSIASTICUS: That is most certainly a well-formulated question, Socrates! Hard though it is to believe, such is indeed the case. Or rather it was until the mid-1990's when several health librarians acquired a basic knowledge of research design through involvement in critical appraisal skills training [7, 8], evidence-based medicine or systematic review activities [9].

SOCRATES: So, assuming a conventional pattern of diffusion and innovation [10] we should expect a critical mass of like-minded librarians by about the year 2005 [11]. Is that correct?

Access to the Evidence Base

ENTHUSIASTICUS: Yes, Socrates, you are as perceptive as ever in extrapolating from albeit limited data. Given the existence of specific programmes aimed at teaching critical appraisal skills to librarians [12], it may even be sooner. But even when such a cohort of early adopters [6] appears on the scene, from where will they derive their evidence base? How many will have access to the main library literature databases in the same way that clinicians currently have access to MEDLINE?

SOCRATES: What you are saying, my dear friend, is that we need some munificent professional association to provide access to the evidence base. Or, better yet, some international collaboration that compiles registers of good quality studies and systematic reviews [9]? Then we would witness an accelerated stampede towards evidence-based librarianship. We would then be swimming in CATS (critically appraised topics) [13], journal clubs [14] and the rest of the evidence-based paraphernalia.

ENTHUSIASTICUS: I shall resist the temptation to chide you for your unintentional lemming analogy, Socrates. You fail to acknowledge, however, that many librarians argue that their individual libraries are too idiosyncratic for them to be able to apply research from elsewhere to their services and resources [2].

SOCRATES: Ah, what would people do if they were unable to plead the famous "Not invented here amendment?" If we believe their rhetoric, for the research to be applicable it has to be done in their exact same library. In addition, they say they are too busy and too under-resourced to conduct local research projects themselves. I think that is what someone will one day call a Catch-22 situation! I suppose the situation is even worse when looking at applying evidence across national boundaries or across cultures?

ENTHUSIASTICUS: Yes, as they say here in Athens, "Sparta is, as Sparta does." It does seem to have eluded even the most perspicacious practitioner's grasp that, if we can demonstrate a similar research finding across a number of countries or cultures, this makes that finding *more* generalisable than less so.

SOCRATES: So if we can educate the library profession to trust that findings from another library may, at the very least, provide some insight into their own setting we will be halfway to evidence-based librarianship?

Paucity of Useful Evidence

ENTHUSIASTICUS: That may indeed be true Socrates but, even in my wildest dreams, I cannot see your average Jo Librarian being able to find much evidence to impact on their day-to-day decision making.

SOCRATES: Ah! If finding the evidence is the issue then relief is at hand! Have not several authors already observed that structured abstracts of research studies prove more readable and more retrievable than conventional abstracts [15-17].

ENTHUSIASTICUS: But Socrates! An expert angler with the very best rod may sit for hours beside a spacious pool but they won't catch any fish if that pool is not well-stocked [2]. With fewer than a dozen randomised controlled trials and a couple of dozen cohort studies [18] we are hardly able to feed the existing multitude let alone have fragments left over for the next generation.

SOCRATES: Why, Enthusiasticus you already prove a worthy adherent to the evidence-based paradigm. They always use religious imagery – evangelists, Holy Grail etcetera – when they talk about their movement.

ENTHUSIASTICUS: But seriously, Socrates, research in librarianship is so poor, with much of it being divorced from the questions that matter [19-21] that it is not going to provide an abundant supply for the aspiring EBL practitioner.

SOCRATES: In truth, Enthusiasticus, even I have noticed that the rigorous research is often conducted by academics while the relevant research is the province of practitioners. Hence the need for collaboration! To make matters worse, although new professionals are emerging from departments of information studies having been exposed to courses on research methods it is the old hands who have the experience and authority to identify research questions and facilitate the conduct of practitioner based research within their organisations.

The Wider Evidence Base

ENTHUSIASTICUS: So, aside from bridging the research-practice gap [22] *and* the generation gap, it is a relatively easy task I have set myself, Socrates!

SOCRATES: If it were just down to you, Enthusiasticus, you might well be drawing your pension before you start to see changes. Is it not true, however, that groups such as the Cochrane Collaboration and the Campbell Collaboration have extended their beliefs beyond the evidence base for professional interventions to now look at the evidence for ways of getting research into practice?

ENTHUSIASTICUS: So are you suggesting that we might learn from reviews on how to change professional behaviour? [23-25]. That we need to access a wider knowledge base than might be held within the domain of librarianship?

SOCRATES: Exactly, Enthusiasticus. The success, or otherwise of EBL might well depend on our ability to adopt the wider lessons of evidence-based practice [26, 27] rather than to spend too much time in introspection and subsequent despondency [28].

On Reviews and Guidelines

ENTHUSIASTICUS: I certainly agree, Socrates, that the ideal may become the enemy of the good. Why only the other day I was advocating the development of pragmatic practice guidelines where statements of good practice, initially based on professional consensus, are progressively overwritten as good quality research evidence appears [29].

SOCRATES: Now you are talking, Enthusiasticus! And is it not equally likely that broad based reviews overviewing a particular area of professional practice might prove more immediately useful than very-focused reviews probably containing very little in the way of research studies [30, 31]?

ENTHUSIASTICUS: So true, Socrates. In fact such reviews could usefully be mapped to the six domains of Crumley and Koufogiannakis [32] namely; Reference/Enquiries, Education, Collections, Management, Information Access and Retrieval and Marketing/Promotions, etc. That would then give us a realistic picture of the knowledge base.

EBL : A Reality?

SOCRATES: So with international collaboration [33], higher quality relevant research, a database of pre-appraised studies [34], and assorted tools and technologies such as CATS, guidelines, systematic reviews then EBL will, at last, be a reality?

ENTHUSIASTICUS: We would certainly be closer to achieving that goal, my learned friend. Yet, we would probably also have to invent a pedigree for Evidence-based Librarianship to establish that it has, in fact, already been in existence for many decades. Remember how the advocates of Evidence-based Medicine claimed to trace its early history back to 18th Century France [35] and David Sackett

avowed that the randomized controlled trial dated from the Bible book of Daniel [36]!

SOCRATES: All right then, let us manufacture an illustrious genealogy that includes Casanova (a proponent of the multiple case study) and other famous librarians (that I should be able to name but can't!).

ENTHUSIASTICUS: Don't overlook the possibility of publication bias in the case of the restless Mr Casanova. After all, we only know about his success stories!

SOCRATES: A worthy pioneer for the ubiquitous "How we done it good at our library" genre of case studies reported in the library literature, wouldn't you say? Continuing with this hypothetical genealogy we can extend less tenuous tendrils through to Joanne Marshall and to the Health Informatics Research Unit at McMaster [9, 11]. Surely now practising librarians will embrace Evidence-based Librarianship as their rightful birthright?

ENTHUSIASTICUS: And to that we can add the pioneering cohort studies of the 1940s, 1950s and 1960s, although not labelled as such at the time. Truly librarians have reason to be proud of their EBL pedigree, especially as it extends far back beyond the time when the term "evidence-based" entered the vocabulary of healthcare practitioners.

SOCRATES: True, so true!

ENTHUSIASTICUS: And yet Socrates, observe how almost all these pioneering studies were conducted by academic health sciences librarians. Does that not mean that it will only be ivory tower inhabitants such as you and I who make a living by browbeating practitioners until they feel guilty about being non-evidence-based?

SOCRATES: Ah, at last, a realisable aspiration for our profession – where the needs of the many are tyrannised by the will of the few! Now you have filled me with the same despondency that previously cast its shadow on your furrowed brow! From where will our hope come?

ENTHUSIASTICUS: Hark! But what is that strange sound and rarefied light emanating from yonder grove?

SOCRATES: An apparition! Can it be that yon muse, Helena, makes her virtual journey through Elysian wheat fields and purple mountains.

HELENA: Greetings lovers of Truth! Be ye not afraid. I shall guide your path, as EBL practitioners, so that you can transcend the superficial and mundane, harnessing tools to eliminate human biases and thus approach a true reality. Do not content yourselves with superficial constructs of reality, but go forward EBL librarians! Seek ye to understand the truth at a deeper level!

ENTHUSIASTICUS: Can you credit such an apparition?

SOCRATES: No way! It has the questionable validity so often found in the arguments of our profession. Have we been drinking too much from Lethe's distilled dews?

ENTHUSIASTICUS: What make we of this apparition then?

SOCRATES: Though such a vision may strengthen our wavering resolve, we librarians must trust in ourselves, not some external inspiration. Carpe diem! Let us seize this opportunity and integrate evidence into our practices!

ENTHUSIASTICUS: Indeed. And let history reveal whether librarians are willing supplicants to EBL, making high-quality research-supported decisions, or whether they be forever condemned to eke out an existence in Stygian obscurity!

SOCRATES: If librarianship does indeed ignore this opportunity, we shall have none to blame but ourselves. Now all we have to do is find some visionary health library journal to publish our thoughts and we can get the EBL bandwagon truly rolling.

ENTHUSIASTICUS: Unfortunately, Socrates, we have carried out our initial task of raising awareness about EBL and critical appraisal all too well. Readers of any self-respecting health library journal will recognise this dialogue as the lowest form of evidence (that is, personal opinion) and they will all just completely ignore it!

Exeunt the two sages continuing their dialogue as they walk off through the groves.... ◆

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Health Sciences Multimedia Collection Project

http://www.healcentral.org/

This project's mission is to make "a rich collection of multimedia freely available to health science educators." HealCentral is to be fully functional by Spring 2002 and will become a component of the National Digital Library for Science, Mathematics and Technology Education, an initiative of the U.S. National Science Foundation.

A New Journal : Electronic Healthcare

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A new Canadian publication has come on the scene: *Electronic Healthcare*. Its advisory editorial board has some prominent individuals including Dr. Joanne Marshall. Check it out and pass on your thoughts to CHLA/ABSC Past President, Jessie McGowan.

A Quantative Analysis of Publication Type Indexing of Sources Used in the Development of Practice Guidelines and Evidence-based Summaries in Oncology Insights Again from a Provincial Cancer Agency

Mike Fraumeni[1]

Abstract

BACKGROUND: Publication type indexing analysis of best evidence references of clinical practice guidelines and evidence summaries has not been published to this author's knowledge. **OBJECTIVE:** Quantitative examination of publication types and some MeSH study types of the journal sources that a provincial cancer agency has used for best evidence to provide a further understanding of the indexing process. **METHODS:** References cited on the Cancer Care Ontario Practice Guidelines Initiative (CCOPGI) Web site were searched in PubMed and subsequently printed using the MEDLINE format. In addition, titles of all the references used were analyzed for randomized information content. **RESULTS:** Publication types *Clinical Trial* and *Randomized Controlled Trial* represented the two highest indexed terms while the MeSH check tag Comparative Study and MeSH heading *Follow-Up Studies* were the greatest indexed terms from a selected list of other headings. References selected including 'meeting abstracts' included the word 'random?' truncated approximately in 25 per cent of the references. **CONCLUSIONS:** Best evidence using references cited from a provincial cancer agency's guidelines Web site included not only 'clinical trials' and 'randomized controlled trials' as expected but other study types as well, demonstrating that when searching the literature for best evidence in such an environment, it may be necessary to include a variety of study types, ensuring adequate sensitivity while maintaining acceptable specificity levels.

Introduction

In a previous article, the sources that Cancer Care Ontario (CCO) cited to develop best evidence for their clinical practice guidelines (CPG) and evidence-based summaries were examined [1]. As a follow-up to the analysis, it was thought that it may be valuable to librarians if a quantitative examination was performed of the indexing of all publication types (pt) and some of the Medical Subject Headings (MeSH) study types of those references. To this author's knowledge, no such analysis has been published from a population of references used to develop CPG and evidence-based summaries apart from a short analysis of a CCO study presented at the Annual Meeting of the American Society of Clinical Oncology, which appeared to analyze content rather than the indexing practice, of updating of CCO CPG [2].

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In this author's experience, clinicians involved with best evidence development ask for literature searches to be done and specifically request that they wish retrieval to be limited to 'randomized controlled trials' or 'clinical trials'. As has been observed, randomized controlled trials (RCTs), while one of the most powerful tools in clinical research, are not always available for every health care issue and may not be appropriate or feasible to answer certain health question [3]. Therefore, during the reference interview, this author recommended that it might be best to broaden the strategy to include other study types and terms such as *comparative studies, meta-analysis, multicenter studies* and *guidelines*, to mention just a few. Usually clients agree with this, particularly when it has been communicated that published or existing clinically-based search filters or hedges are available, most notably on PubMed using the clinical queries link, which were developed through extensive documented research. The purpose of this study then, is to examine quantitatively and primarily, the publication types, and secondarily some MeSH study types, of the journal sources that CCO have used to construct their CPG and evidence-based summaries. Hopefully, this analysis will provide some insight into the published study types that a Canadian, oncology focused health care organization uses in a practical setting for best evidence. Perhaps it may also assist those involved with guideline development to perform literature searches that retrieve best evidence in a more effective and efficient manner.

The National Library of Medicine indicates that publication types, which developed from the former citation types describing "the form of presentation of an article", facilitate retrieval of studies that incorporate a specific study design or research methodology. These designations were introduced to MESH in 1990-1991 [4]. Therefore, publication types are a relatively recent addition to MeSH indexing. Most of these terms have been added to retrospective MEDLINE citations as well, allowing for retrieval of citations included in MEDLINE before a term was introduced [5]. Publication types have since been characterized as being very valuable for the identification of high-quality therapy studies and meta-analyses [6]. There also is some evidence that clinicians themselves have identified certain publication types as extremely important in clinical searches [7]. Moreover, others have indicated that the current scope of publication types be expanded to allow for more effective retrieval of the medical literature [8].

Related to any discussion of indexing, it should be mentioned that indexers do not consistently assign MeSH headings as has been shown through indexing research [9]. While MEDLINE has been referred to as the world's premiere bibliographic database [10], research on MEDLINE indexing practice has shown that the quality of indexing is

Table 1. Publication Type Indexing and Corresponding MEDLINE Equivalents

Publication Type	Number of times indexed*	% relative to Journal Article [pt] (n=1131)	Number of references in PubMed**	% relative to Journal Article [pt] in PubMed**
Journal Article [1991]	1131	100.00	10945085	100.00
Clinical Trial [1991]	664	58.71	314037	2.87
Randomized Controlled Trial [1991]	538	47.57	148909	1.36
Multicenter Study [1991]	223	19.72	41124	0.38
Clinical Trial, Phase II [1993]	78	6.90	6571	0.06
Clinical Trial, Phase III [1993]	61	5.39	1685	0.02
Meta-Analysis [1993]	60	5.31	5950	0.05
Review, Tutorial [1991]	55	4.86	526682	4.18
Review [1991]	51	4.51	834171	7.62
Guideline [1991]	23	2.03	9195	0.08
Practice Guideline [1992]	21	1.86	5774	0.05
Controlled Clinical Trial [1995]	18	1.59	57925	0.53
Review, Academic [1991]	14	1.24	59414	0.54
Clinical Trial, Phase I [1993]	11	0.97	4431	0.04
Consensus Development Conference [1991]	10	0.88	3300	0.03
Editorial [1991]	10	0.88	130517	1.19
Letter [1991]	10	0.88	441225	4.03
Review, Multicase [1991]	6	0.53	6478	0.06
Comment [1991]	5	0.44	182232	1.66
Consensus Development Conference, NIH [1991]	3	0.27	405	0.00
Review Literature [1991]	3	0.27	25804	0.24
Review of Reported Cases [1991]	2	0.18	42796	0.39
Clinical Trial, Phase IV [1993]	1	0.09	108	0.00
Congresses [1999]	1	0.09	32354	0.30
Validation Studies [2001]	0	0.00	2390	0.02
TOTAL	**2999**			

Note: The number in square brackets represents the year the heading was introduced as a publication type
*   Total number of references examined
**   Date PubMed searched, December 18, 2001; **n=10945085**

certainly less than ideal. Others have recently indicated that this is a concern in the development and use of knowledge extraction methods relying on MeSH indexing [11]. Moreover, significant changes have resulted with the indexing of therapy studies, specifically designations that indicate design methodology, since the introduction of publication types [12]. To what extent this has altered the indexing process is not entirely known. McKibbon and colleagues discuss these changes in further detail in their seminal work on evidence-based medicine [13].

Methods

As indicated in the previous article, the references cited on the Cancer Care Ontario Practice Guidelines Initiative

Table 2. MesH Heading Indexing

MeSH Heading	Number of times indexed	% relative to number of references examined (n=1171)
Comparative Study [1966] (check tag)	244	20.84
Follow-Up Studies [1967]	231	19.73
Prospective Studies [1967]	188	16.05
Clinical Trials [1980]	130	11.10
Random Allocation [1991]	103	8.80
Randomized Controlled Trials [1990]	92	7.86
Retrospective Studies [1967]	64	5.47
Practice Guidelines [1993]	26	2.22
Meta-Analysis [1989]	18	1.54
Case Report [1966] (check tag)	16	1.37
Evaluation Studies [1974]	10	1.85
Pilot Projects [1974]	10	1.85
Clinical Trials, Phase III [1993]	7	0.60
Multicenter Studies [1989]	6	0.51
Cohort Studies [1989]	5	0.43
Cross-Over Studies [1995]	5	0.43
Feasibility Studies [1980]	5	0.43
Case-Control Studies [1990]	4	0.34
Clinical Trials, Phase II [1993]	2	0.17
Clinical Trials, Phase I [1993]	2	0.17
Review Literature [1988]	1	0.09
Clinical Trials, Phase IV [1993]	0	0.00
TOTAL	**1169**	

Note: The number in square brackets represents the year the heading was introduced

(CCOPGI) Web site *<http://hiru.mcmaster.ca/ccopgi>* were used in this study [14]. In total, there were 1174 journal articles cited and 267 meeting abstracts originating from 38 CPG, and 5 evidence summaries produced by 14 Disease Site Groups. Each citation was individually searched in PubMed and if found, a print of the reference was made using the MEDLINE format. Three of the 1174 journal articles could not be located in PubMed and therefore were not analyzed.

Each reference was subsequently analyzed and counts were tabulated of all the publication types indicated from the 1171 references (see **Table 1**). A percentage relative to *Journal Article* [pt], the most predominant publication type in MEDLINE, is provided for each publication type for both the 1171 references and for the PubMed database.

A selected list of potential study types of Medical Subject Headings (MeSH) were counted from each reference. This list included the following in alphabetical order:

Case-Control Studies; Case Report; Clinical Trials (CT); Clinical Trials, Phase I; Clinical Trials, Phase II; Clinical Trials, Phase III; Clinical Trials, Phase IV; Cohort Studies; Comparative Study; Cross-Over Studies; Evaluation Studies; Feasibility Studies; Follow-Up Studies; Meta-Analysis (MA); Multicenter Studies (MS); Pilot Projects; Practice Guidelines; Prospective Studies; Random Allocation; Randomized Controlled Trials (RCT); Retrospective Studies; Review Literature.

Table 2 indicates each of these headings and the number of times indexed from the 1171 references. Finally, a

Table 3. MesH Heading Indexing

Word Occurrences	Journal articles	Meeting abstracts (n=267)
Number of times of 'random*' in title field (1174 refs)	299	72
Percentage of 'random*' in title field (1174 refs)	25.47	26.95
Number of times *RCT* [pt] indexed in PubMed (1171 refs)	538	N/A
Percentage of *RCT* [pt] indexed in PubMed (1171 refs)	45.83	N/A

Note: The number in square brackets represents the year the heading was introduced

word count was performed on the word 'random*' (truncated) for the 1174 journal references and the 267 meeting abstracts (see **Table 3**).

Results

From **Table 1**, the *Journal Article* [pt] represents the greatest indexed publication type of the 1171 references; this is expected as this heading is the most prevalent publication type for references in MEDLINE. The second most indexed term was Clinic*al Trial* [pt] indexed in 56.7 per cent of the 1171 references cited. *Clinical Trial* [pt] indexing as a family which includes phases I, II, III and IV together with *Clinical Trial* [pt] alone, was indexed in 69.51 per cent of the 1171 references. Third was the term *Randomized Controlled Trial* [pt], indexed in 45.83 per cent of the 1171 references. Fourth was the term *Multicenter Study* [pt] indexed in 19 per cent, while the term *Clinical Trial, Phase II* [pt] was the fifth most cited term indexed in 6.64 per cent of the 1171 references.

As a percentage of *Journal Article* [pt], these same publication types as well as the others listed, have similar percentages as is shown in **Table 1**. These percentages are indicated as it is useful to compare individual publication types relative to *Journal Article* [pt] in PubMed with the knowledge that MEDLINE contains much information which is not of clinical significance [15].

From **Table 2**, the most cited MeSH heading is *Comparative Study* with a percentage relative to the number of articles examined at 20.84, followed by *Follow-Up Studies*, *Prospective Studies*, *Clinical Trials*, *Random Allocation* and *Randomized Controlled Trials*. Percentages are also provided for each heading relative to the number of references examined. The first 7 headings accounted for 89.8 per cent of the headings used from the list of 21 headings for the 1171 articles examined.

Lastly, in **Table 3**, the word 'random*' (truncated) was examined in all of the journal references and meeting abstracts as an indicator of the frequency authors have used such terminology in their titles. The word 'random*' appears slightly more often in the meeting abstracts than in journal articles while the number of times *Randomized Con-*

trolled Trial [pt] is nearly double that of the word 'random*' appearing in the titles of journal references when examined as a percentage of the references analyzed.

Discussion

From an analysis of the above results, it is interesting to note that *Clinical Trial* [pt] is the most cited publication type apart from *Journal Article* [pt] from this group of best evidence references. This is to be expected as it has been found through research [16] and subsequently emphasized that the best single-term strategy for MEDLINE that retrieves the least irrelevant material in a search for therapy, prevention and control articles is searching for *Clinical Trial* as a publication type [17]. The set of CPG and evidence-summaries used for this study, with the exception of two, deal with therapy or therapeutic interventions and the two that do not are indirectly related as these deal with disease surveillance and staging. Also noteworthy is the finding that *Randomized Controlled Trial* [pt], a strong indicator of excellence in study design, is the third most cited; this also is to be expected [18]. When examined as a percentage relative to *Journal Article* [pt] in this study, both of these terms score significantly higher in comparison to this percentage in the PubMed in its entirety (CT pt 58.71%, RCT pt 47.57% {study}v.s. CT pt 2.87%, RCT pt 1.36% {PubMed}). This, again, is to be expected since MEDLINE includes much material that is not of use in the clinical setting.

In addition, as has been indicated in the literature, one would expect for enhanced sensitivity, indexing of the publication types *Multicenter Study*, *Controlled Clinical Trial* and *Meta-Analysis* [19]. All of these terms with the exception *Controlled Clinical Trial*, possibly because this publication type was only introduced in 1995 and may not have been retrospectively indexed to the extent of the others) scored significantly higher when examined as a percentage relative to *Journal Article* [pt] in this study as compared to this percentage in MEDLINE in its entirety (MS pt 19.72%, CCT pt 1.59%, MA pt 5.31 {study} v.s. MS pt 0.38%, CCT pt 0.53%, MA pt 0.05% {MEDLINE}). This study has also demonstrated that best evidence for therapy-related clinical

> *Hopefully, this analysis will provide some insight into the published study types that a Canadian, oncology focused health care organization uses in a practical setting for best evidence.*

issues is founded on other study types that could be included in development or refinement of research-based clinical filters for enhanced sensitivity for best evidence. For example, *Review* [pt] and Review, *Tutorial* [pt] combined were indexed 106 times representing 9.37 per cent relative to *Journal Article* [pt]. It has been mentioned that clinicians will often use review articles to find the best evidence and not use, or always be able to use, original literature [20]. *Guideline* [pt] and *Practice Guideline* [pt] combined were indexed 44 times representing 3.89 per cent relative to journal articles.

> *... results from this analysis suggest that when searching the medical literature for therapy-related best evidence in oncology, it may not be appropriate to rely strictly on conservative use of well documented MeSH terms ...*

Also, MeSH study type headings that have been indexed quite extensively in this analysis include *Follow-Up Studies* (19.73% relative to number of references examined), *Prospective Studies* (16.05% relative to number of references examined), and *Retrospective Studies* (5.47% relative to number of references examined). The MeSH check tag *Comparative Study*, the most cited term as noted in **Table 2** (20.84% relative to number of references examined), has been indicated as significant in the literature [21].

Of additional interest is the finding that *Case Reports*, also a MeSH check tag of which evidence is generally considered weak, were indexed 18 times in the 1171 references.

When discussing how often the word 'random*' appears in the title of references, it should be emphasized that the use of this word does not necessarily imply that the article is a randomized trial. An author may be discussing a meta-analysis or review where the word 'random' has been used in the title to reflect the type of articles examined for such an analysis. Additionally, the author may be using the word correctly or incorrectly to indicate some sort of randomized process. Nevertheless, it is interesting to note that the word 'random*' was used approximately 25 per cent in both journal article and meeting abstract titles as indicated in **Table 3**. As a reference, just over 45 per cent of the references used in this study were indexed with *Randomized Controlled Trial* [pt]. In the analysis of a CCO study presented at the Annual Meeting of the American Society of Clinical Oncology referred to above, it was noted that 77.5 per cent of new evidence was related to randomized controlled trials [22]. This greater percentage of RCT referencing may be associated with reviewers concentrating more on the

actual content of CPG and evidence summaries as opposed to providing introductory developmental background information. Again, it should be noted that actual content rather than indexing practice, was most likely analyzed in this report. Interestingly, it has been noted that to make updating of guidelines easier and less onerous, it would help if future guidelines indicated the type of evidence that would be deemed significant to require revisions of existing guidelines [23].

An obvious limitation of this study concerns the nature of the topic in question. This study has concentrated on oncology-related topics; whether the results can be extrapolated to other areas of medicine is not certain. Another limitation is that articles were not given any weighting as to their contribution to the CPG or evidence summary development. It could be argued, for instance, that references contributing to introductory or background information as indicated above should have been excluded from this study. Also, some of the cited references were used more than once so counts of terms for these references have also been duplicated. It was noted, for example, that a concept paper on the development and use of practice guidelines was cited numerous times. Such a citation, it may be argued, should perhaps have been counted only once in this study. Furthermore, some of the references used for this study were published prior to 1990-91; the quality of retrospective indexing practice compared to current indexing practice is not precisely known.

As a final point, results from this analysis suggest that when searching the medical literature for therapy-related best evidence in oncology, it may not be appropriate to rely strictly on conservative use of well documented MeSH terms but rather the searcher should be somewhat more liberal with the use of other study type terms to enhance sensitivity while maintaining acceptable specificity levels. Best evidence in the CCO guideline environment, as demonstrated here, relies on a variety of study types. Conveying this information during the reference interview with clinicians and other health care personnel involved with constructing best evidence documentation should make it evident that these issues in searching and retrieval of the medical literature for best evidence are important and worthy of careful consideration. ♦

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Reed Elsevier Considering Merger with Wolters Kluwer

http://www.observer.co.uk/business/story/0,6903,628089,00.html

According to market speculation, a marriage between Reed Elsevier and Wolters Kluwer is expected before the end of 2002. This merger would create one of the largest publishing groups in the world with an approximate market value of $40 billion (CDN). For more information, see the Guardian article URL above.

Great List of Online Pharmaceutical Information Resources

http://listserv.buffalo.edu/archives/medlib-l.html

Thanks to Valerie Rankow for collating the responses to her query for online drug resources, you can find this great resource at MEDLIB-L's archives (dated January 10, 2002). See January 2nd week under author's name, Valerie Rankow.

Innovation + A Commitment to Service Excellence = Success
An Interview with Award-winning Librarian, Jim Henderson

Tracy Havlin[1]

Recently, I had coffee with Jim Henderson to discuss the Distinguished Service and Leadership Award he was given in honour of outstanding alumni during the 40th anniversary events of the University of British Columbia's (UBC) School of Library, Archival and Information Studies (SLAIS). Jim was primarily recognized for his early work in advancing resource sharing among health libraries across Canada, but also for his years of teaching at SLAIS and his continued mentoring efforts of new health librarians.

"Through all these works, Jim has continued to direct the work of the Medical Library Service (MLS). In his time there he has developed and delivered training courses in Internet Grateful Med and now PubMed. He has promoted access to OVID and MDConsult for all physicians in the province [BC]. He has provided training for residents on the value of medical information. His staff provides excellent reference service and has developed a Web-based newsletter [*Cites & Bytes*] highly valued by clients and librarians throughout Canada.

We believe that Jim's work as evidenced above, is strong evidence for awarding him the SLAIS Distinguished Service and Leadership Award." (Pete Rose and Lea Starr, 2001: nomination letter to SLAIS.)

Tracy: Can you share your thoughts on receiving this award?

Jim: I was very pleased and surprised to receive the award. It recognized work done in collaboration with B.C. health libraries. Having this spirit recognized was gratifying to me. DOCLINE would not have happened without the vision and support of people at CISTI, at the U.S. National Library of Medicine, and at the NN/LM center in Seattle. It was great to have been at the right place at the right time with the right people and to succeed at innovation as a result.

In speaking with Jim, I wanted to find the key to his success so I began with questions about his academic background and work history. Born and raised in British Columbia, Jim started out studying mathematics as an undergraduate at the University of Victoria (BSc, 1971) before heading to Queen's University to do his Master's degree (MSc, 1972), also in mathematics. Not only did he acquire a Master's degree in one year, but also even more impressive is the fact that he was offered a permanent librarian position in the Science Division of the UBC Library in 1973, one year before graduating with his Masters in Library Science from SLAIS. In 1982, Jim's library career shifted toward a health focus when he moved to Woodward

Biomedical Library at UBC. By 1990, Jim had made major strides in his professional growth and took a sabbatical from the UBC Library to explore and set-up a national, pre-Internet, information service for the Canadian Bacterial Diseases Network. For the past 11 years, Jim has been highly visible both as an active member of numerous health library associations (Health Libraries Association of British Columbia, CHLA/ABSC, and the Pacific Northwest Chapter of the Medical Library Association) and as the Director of the Medical Library Service (MLS) for the College of Physicians and Surgeons of British Columbia.

When asked who was important in terms of shaping his library career, Jim mentioned four predominant influences. First, David Thomas, now retired from the Science Division of the UBC Library, was cited for giving Jim an opportunity to grow as a new library graduate. Second, Anne Piternick, a retired SLAIS faculty member, was also pivotal because she asked Jim to co-teach an online searching course with her in the 1980s. Third, Jim feels indebted to Bill Parker, now retired from Woodward Biomedical Library, for his generous mentoring, especially with complex online searches for SDI's in which Jim found inspiration to tweak systems from Bill's programmer style approach. And, last but not least, Jim acknowledged Bill Fraser, the previous MLS Director, with whom he team taught the medical libraries course at SLAIS and who provided such a solid foundation at MLS.

Tracy: Considering the wealth of your professional experience, what does being a librarian mean to you?

Jim: Being a librarian has enabled me to work at the interface of technology and social science. I enjoy making technology work for what people actually need and want. Two things particularly have really been satisfying for me:

- *the great collaborations with MLS staff, librarians and doctors that have moved health libraries ahead so quickly and*
- *the thrill of discovery, often through working with new librarians (the future is bright) and teaching doctors as well as SLAIS students.*

The coffee was long gone, but I was feeling so inspired by his history and current enthusiasm that I thought it important to get a snapshot of Jim's typical workday. I should inform readers that I first met Jim two years ago when he hired me on a short-term contract for the Canadian Health Network so I had only a vague notion of his work at MLS. I found out that in addition to his daily administrative responsibilities (e.g., budget preparation and financial reports, service evaluation, promotion and advocacy, staff meetings, etc.), the other things Jim does fairly often include:

- selecting books and updating lists to evaluate and make recommendations for hospital libraries,
- preparing to teach by updating handouts, making arrangements with his collaborators, keeping in touch with

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the Canadian Medical Association (who pay for OVID) and teaching, which Jim describes as, "time-consuming, [but] fun and a great way to interact with our users intensively; the biggest issue is variation in computer literacy and the biggest worry is the misconception that literature searching is easy",

. Council meetings for the Executive Committee of the College,
. reading relevant articles,
. association work, conferences, meeting attendance and
. "playing around with the [MLS] Web site, locating new sites to add, figuring out ways to improve access to full-text through *Cites & Bytes* and through MDConsult".

Jim also manages to embody the ideals underlying outreach and value-added service. By travelling throughout the many small communities of B.C. to meet doctors in their practice, Jim promotes the services available to them as College members via MLS and provides training in the ef-fective use of clinical information resources.

On a more futuristic note, Jim believes that "doctors shouldn't have to know an affiliation with a particular library." And by the same token, one of Jim's goals is to provide a seamless interface to health information, accomplished by the National Network of Health Libraries (NNHL), which he sees as a positive force for health libraries in Canada, large and small, to coordinate innovative and collaborative efforts.

Tracy: What is your vision of the future of librarianship?

Jim: The Internet has succeeded where libraries have failed in the past in one critical effort: convincing everyone that what you do can be based on what is known, not what someone else thinks. The future of libraries is bright, but the golden days are a few years off. When the value of content (knowledge) versus connections/wires and data is realized, we will be in the gravy. ◆

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Tracy Havlin is a Reference Librarian/Subject Contact for Rehabilitation Sciences at the UBC Woodward Biomedical Library. She is also the CE Coordinator for PNC/MLA 2002 and incoming Vice-President/President Elect for HLABC.

WebMD Acquires Medscape Portals

December 26, 2001

With WebMD's acquisition of the Medscape portals, WebMD has created the largest network of online resources and services for medical professionals and consumers. In time, WebMD will integrate Medscape into its existing suite of products and services.

WebMD Press Release

MEDLINEplus and Its News Providers

In case you were ever wondering... MEDLINEplus licences its news content through a news aggregator ScreamingMedia. The feeds through this aggregator include Reuters, Associated Press, New York Times Syndicate, United Press International, Press Association, Canadian Press and Deutsche Press-Agentur. only.

Naomi Miller

REPORTS/RAPPORTS

Canadian Health Libraries Association / Association des bibliothèques de la santé du Canada

Annual General Meeting / Assemblée générale annuelle
Quebec City, Quebec, May 8, 2001 / le 8 mail 2001

Minutes of the CHLA/ABSC Twenty-Fifth Annual General Meeting

1. Call to Order at 9:16 a.m.

1.1 Introduction

Patrick Ellis welcomed the membership and thanked ASTED (Association pour l'avancement des sciences et techniques de la documentation) for sponsoring the AGM breakfast.

1.2 Adoption of the Agenda

P. Ellis noted a correction to the numbering of the French version of the agenda, and asked that all in attendance stay after the AGM for discussion of the National Network of Libraries for Health.

Tom Flemming moved to adopt the Agenda. Lois Wyndham seconded. Carried.

1.3 Adoption of the Minutes of the 24th Annual General Meeting

Margaret Butkovic moved to adopt the Minutes. David Crawford seconded. Carried.

2. Business Arising

There was no business brought forward.

3. Board Reports

3.1 President - Patrick Ellis

P. Ellis asked for a minute of silence in remembrance of Jim Rogers and Beatrix Robinow.

He reviewed the accomplishments of the past year in the context of meeting the goals of the strategic plan. He noted that CHLA/ABSC is continuing to foster relationships with OHLA and MLA, and stressed the importance of communication with the Chapters. He emphasized that to be effective, CHLA/ABSC must have support at the grass roots level, and asked that the Chapter Presidents continue to provide the Board with guidance on any of the work being done by CISTI/ICIST, CCHSA/CCASS, National Library/ Bibliothèque National, and on the DOCLINE, NNLH and ACMC key initiatives. He referred to a crisis situation earlier in the year when one of the Chapters failed to put forth nominations for an Executive Committee, but was pleased to report progress in sustaining the Chapter. He also re-ported that a new group is seeking Chapter status.

P. Ellis introduced plans for a membership survey to be conducted in conjunction with local focus group discussions. He suggested that this was an excellent opportunity to mark the 25th anniversary year of the Association, noting that the survey would be the first in the organization's history. He reported that the CHLA/ABSC Board has authorized expenditure up to twenty thousand dollars to conduct the project. He paused to give people an opportunity to discuss the initiative. There were no questions or comments from the floor. He also informed the membership that the Oral History Project is on track for implementation in this, the 25th Anniversary year.

P. Ellis asked for a round of applause to acknowledge the work of Nancy McAllister and Jackie MacDonald as CHLA/ABSC representatives to the Canadian Council on Health Services Accreditation (CCHSA/CCASS). He reported that Nancy and Jackie will be developing a list of quality indicators to address the omission of libraries in the accreditation process. Nancy has also submitted a Web page proposal to the Board. He noted that it is Nancy's last year in the position and that the Board will be reviewing the CCHSA/CCASS Representative cycle.

P. Ellis explained that there would be no Public Relations Report due to the difficulties in keeping the Public Relations Director position filled over the past year. He reported a change to the *BMC* Editorship cycle. He spoke of the relationships between CHLA/ABSC and MLA and acknowledged Carla Funk, MLA Executive Director, for championing the hospital librarian t-shirts. He also thanked Davida Glazer for her work as Cochrane Representative and noted that Ellen Crumley would be assuming the position in the upcoming year.

He congratulated the latest recipients of CHLA/ABSC Lifetime Honorary Memberships: Alan MacDonald, Dick Fredericksen and Phillipe Lemay, all of whom were members of the first CHLA/ABSC Board of Directors. He recognized Liz Bayley's work on the CHLA/ABSC Web site and thanked her, George Beckett, Shelagh Wotherspoon and Sue Cleyle for the smooth functioning of the Web site, Can-MedLib, and other Association listservs. With Liz's departure from the Board a new model is being developed whereby the Web site will fall under the joint responsibility of the PR Director and the *BMC* Editors.

P. Ellis called for a round of applause in recognition of ASTED, the 2001 Conference Planning Committee and its Chairs, Ginette Langevin and Carole Brault. He reminded people that the 2002 Annual Conference will be held in Kitchener-Waterloo, followed by 2003 in Edmonton. He announced that the Newfoundland & Labrador Chapter will be hosting the Conference in 2004.

He thanked Betty Sutherland for supporting his work on the CHLA/ABSC Board, recognizing her as an advocate for CHLA/ABSC both at Dalhousie University and through the Maritime Chapter. He also thanked the Health Science Information Consortium of Toronto for hosting recent Board meetings and Dorothy, Kim and Charlie for the work done by the Secretariat. He noted that the organization was fiscally healthy with membership holding steady at the same level of approximately 400 for the past 6 to 8 years. He characterized his year as President as "an absolute gas," thanked the Board for their good will and humor, and wished the Association well on its 25th Anniversary.

Susan Murray moved to accept the report. Toni Janik seconded. Carried.

3.2 Continuing Education - Laurie Scott

L. Scott announced that three grants were awarded for CE attendance at this year's Annual Conference. Andrea Hodgson, Jean Maragno and Joanne Mullenbach received funds from the 25th Anniversary Professional Development Grant. She urged members to apply for grants, noting that MLA CE courses also qualify under the terms of the award. She reported that all the Conference CE courses were accredited, as well as Rita Vine's course *Searching Faster and Smarter on the Web*. She noted that CHLA/ABSC CE participation certificate has also been revised and is now available in electronic format. She noted that there had been very little interest expressed in the creation of a mentorship program and that the idea has been put on hold until people are given the opportunity to offer feedback during the focus group sessions and membership survey. The future of the initiative will be reassessed after the survey is completed. She put out a call for topic suggestions and volunteers to create new *Fact Sheets*, particularly on the subject of accreditation. She also stated how much she is looking forward to participating in the Canada-wide focus group sessions and expressed her expectation that issues discussed at the focus groups, and responses to the membership survey will provide substantive information that will better inform CE *Fact Sheets* and course development, as well as, any future initiatives.

Mary Robinson moved to accept the report. Caren Mofford seconded. Carried.

3.3 BMC - Ellen Crumley for Richard Thornley

E. Crumley reported on changes to the *BMC* Editorial Team structure, explaining that the position of Past Editor has been added to the Assistant Editor/Editor model. It is felt that by adding a third year on the end of the cycle, the Past Editor will be able to mentor the incoming editor. Mary Robinson has agreed to stay on with *BMC*, becoming the first person to hold the Past Editor position. The Past Editor will also be responsible for maintaining the manuals, and contributing content for the Web site.

She informed the membership that the application to have *BMC* indexed in MEDLINE was unsuccessful. The *BMC* Editor will reapply in three years once the waiting period for reconsideration has lapsed. She congratulated this year's recipients of the *BMC* Research Paper Prize: Debbie Bang, Marg Muir and Keith Denny for their article, *Consumer health information services : how are they delivered across Canada?* She thanked B.C. Decker for continuing to support the *BMC* Research Paper Prize.

She announced that recruitment for the Assistant Editor position is ongoing. She thanked Steve Zoltai, Mary Robinson, Dorothy Davey, and all of the contributors who write regular reports and features. She updated the membership on the progress of the Tables of Content Project, indicating that soon all of the back issue TOCs will be available on the CHLA/ABSC Web site. She invited feedback on the format and content of the *BMC* and asked for suggestions on how the publication could be improved. She also encouraged the Chapters to submit updates including the names of new members, retirements and reports of CEs and events.

Cathy Rayment moved to accept the BMC Editor's report. Stephanie Walker seconded. Carried.

3.4 Treasurer - Patricia Fortin

P. Fortrin remarked on the pleasure of bringing in her final report as Treasurer "in the black." She reported that the two main sources of income in the past year were funds raised by the Annual Conference held in Vancouver and from the selling of the hospital librarian t-shirts. She noted that Carla Funk had been very active selling the t-shirts at MLA events. She read from the Auditor's Report, confirming that the "financial statements present fairly, in all material respects, the financial position of the Association as at December 31, 2000 and the results of its operations for the year then ended."

She asked for a motion to accept the Auditors' Report and to reappoint Mr. Kenneth D. Kimmerley for the upcoming year.

Jim Henderson moved to accept the Auditors' Report. Tom Flemming seconded. Carried.

Shannon Long moved to accept the Treasurer's Report. Jan Figurski seconded. Carried.

3.5 Nominations and Elections Committee - Liz Bayley

L. Bayley introduced the incoming Board Members: Cathy Rayment as Vice-President/President Elect, Caren Mofford as Treasurer and Tim Tripp as Director, Public Relations. All three were appointed by acclamation. She explained that several people had been approached to stand on the Board of Directors, however, several had had to decline because of the time commitment involved and concern over the additional workload. She mentioned that the Board was considering increasing funding for Board participation so that members from smaller, and outlying institutions can

participate. She noted that Board members are frequently drawn from the Southern Ontario region and/or academic institutions. She pointed out that Board participation creates opportunities for learning and meeting people on a national level and urged members to consider running for Board election. She thanked Lea Starr, Laurie Scott and Marthe Brideau for acting on the Nominations Committee.

Jim Henderson moved to accept the Nominations report. Joan Leishman seconded. Carried.

4. By-laws   Liz Bayley

L Bayley reviewed the proposed by-law revisions, noting that the amendments marked the final activity of her term on the Board. She asked that members vote on each of the changes.

She explained that the first amendment was the result of a suggestion made by Pierre Fournier, translator, who needs be able to invert the name of the Association so that the French name appears first in French language documents.

David Crawford suggested that the wording of the third sentence in Article I be changed to remove the word *provisional* in front of directors. The newly adopted sentence will read:

> The Seal of the Corporation shall be in such form as shall be prescribed by the Directors of the Association and shall have the words "Canadian Health Libraries Association/Association des bibliothèques de la santé du Canada."

L. Bayley noted that the second cluster of changes resulted from gaps in the By-laws surrounding procedures for filling Board vacancies.

Charlotte Beck suggested that the wording of the first sentence in Article VIII. Section 1. be changed to reflect the idea that the decision around whether or not there should be an appointment or a by-election based on the length of time left in the existing term should be left to the judgement of the members of the Board. The newly adopted sentence will read:

> If one of the positions on the Board shall become vacant, at its discretion the Board shall appoint one of their number to serve out the unexpired portion of the term, or hold a by-election to elect a replacement to be confirmed at the next Annual General Meeting.

*Liz Bayley moved to accept the revisions to the By-laws as proposed in the **BMC** mail-out and as outlined above. David Crawford seconded. Carried.*

5. Other Business

P. Ellis announced the secondment of Jennifer Bayne to The Commission on the Future of Health Care in Canada headed by Roy Romanow. Jennifer has been named Director of Knowledge Management and will be responsible for the technology side of the commission including developing and maintaining the Web site, and liaising with the research team to ensure their access to information critical throughout the decision making process. J. McGowan attempted to place a congratulatory telephone call to Jennifer at University Health Network, but was unable to reach her.

6. 2002 Conference - Dawn Bombay

Dawn Bombay, outgoing President of the Wellington-Waterloo-Dufferin Health Library Network, extended an invitation to everyone to attend the 2002 Conference which will take place in Kitchener-Waterloo May 28 to June 1, 2002. She noted that the Conference theme is *the Spirited Connection* and will focus on the topics of Aboriginal health, alternative therapies, EBL (evidence-based librarianship), rural and remote health information, and humanizing the electronic age.

She made mention of Kitchener-Waterloo's unique blend of past and present, noting the charm of Mennonite country and the regional Farmer's Market, in addition to world class shopping, theatre at nearby Stratford Festival, and the annual hot air balloon festival.

7. Transfer of Chair

P. Ellis transferred Chairpersonship of the CHLA/ABSC Board to Jessie McGowan. He thanked the Board for their support throughout his term as President. He also thanked outgoing Board members Liz Bayley and Patricia Fortin. He commented on the upcoming initiatives noting that the next year should be a fun and exciting one, which will see progress on the National Network of Libraries for Health and the completion of country-wide focus group sessions. He asked that people turn out for the "Patrick & Laurie Road Show" noting that in this, the Association's 25ᵗʰ anniversary year, emphasis will be placed on determining and addressing the needs of the membership. He noted that the Board must rely on the Chapters for guidance and take their advice in how best to make the profession more relevant.

8. Adjournment

There being no further business, Carole Brault moved to adjourn the meeting. Elizabeth Uleryk seconded. Carried.

Meeting adjourned at 10:01 a.m.   ◆

COLUMNS

Complementary & Alternative Medicine (CAM)
CAM Terminology

Debbie Monkman[1], Bethany Becker[2]

I n this issue, we have asked Jane Saxton to comment on the significant changes to the complementary and alternative medicine (CAM) terms in the National Library of Medicine's Medical Subject Headings (MeSH). Saxton is the Director of Library Services at Bastyr University, a leading academic centre for naturopathic medicine in Seattle. The Library recently updated their tip sheet, *Complementary & Alternative Medicine Research Using MEDLINE*, a guide that gives the essential MeSH for the CAM searcher. To request a copy of this tip sheet, which may be reproduced as long as credit is given to Bastyr University, contact the library at *library@bastyr.edu*. In addition to MeSH news, we also list some *New and Noteworthy* resources that highlight the complexity of the terminology issue in this field.

Debbie Monkman
Bethany Becker

EDITORIAL. The New MEDLINE Subject Headings for CAM : No Compliments for '*Complementary*'

Jane Saxton, Director of Library Services, Bastyr University

Reprinted with permission from the Bastyr University Library Letter, Spring 2002.

In January 2002, MEDLINE incorporated a significant revision of the Medical Subject Headings (MeSH) for complementary and alternative medicine (CAM). Some of the changes are great improvements, such as: a more consistent emphasis on the international scientific binomial names of plants, rather than their variable common names; the retiring of the general heading *Herbs*, in favor of the botanical *Angiosperms*; and the addition of the heading *Phytotherapy*, replacing *Herbs/therapeutic use*. Happily, *Diet Fads* has been removed from the CAM hierarchy entirely and is now under the MeSH heading, *Diet Therapy*.

But nomenclature is inherently political and the new revisions are a case in point. The primary CAM subject heading in the old MeSH tree (subject hierarchy) was *Alternative Medicine*. That term has now been replaced by the subject heading, *Complementary Therapies*.

The terms "alternative" and "complementary" originated to

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[2] **Bethany Becker**, MJ., Health Promotion and Partnership Consultant, Canadian Health Network, Complementary & Alternative Health Affiliate, Tzu Chi Institute for Complementary & Alternative Medicine. *bbecker@tzu-chi.bc.ca*

describe complete systems of care or specific practices that were outside of conventional health care and not taught in U.S. medical schools. According to the National Library of Medicine, a therapy is considered to be "alternative" when it is used instead of, and "complementary" when used in addition to, conventional treatment [1]. An important distinction, between discrete treatment modalities and truly alternative systems of medicine, has been lost in the new MeSH tree which subsumes both under the heading, *Complementary Therapies*.

Naturopathic medicine, and all of the traditional medicines, such as Ayurvedic and Chinese, are "complete systems of theory and practice that have evolved independent of and often prior to the conventional biomedical approach" [2]. Some of these systems of medicine have existed for thousands of years.

This issue has never been adequately addressed by MEDLINE, but at least in the controlled vocabulary of the database, the former heading *Alternative Medicine* acknowledged that the systems of medicine subsumed under it were alternative, not complementary, to conventional medicine.

Working with the new MeSH headings over time and analyzing how they affect searchers' access to research is a crucial first step in further revision of the pertinent MeSH subject headings. Accurate subject overviews are necessary in order to create accurate subject hierarchies, which impede or facilitate access on the basis of that accuracy. Unfortunately, the cumbersome revision process at MEDLINE ensures that the earliest we could see any changes to these new CAM headings will be 2004.

So what should the overall MeSH heading for CAM be? That is a complicated question. It is difficult to promote a phrase as unwieldy as "complementary and alternative medicine (CAM)," although it does incorporate the concepts of both treatments, as complementary to, and systems of medicine, as possible alternatives to, conventional medicine. In a more concise vein, Bastyr University is suggesting that the term "*collaborative medicine*" be used in common parlance. Whereas "complementary" and "alternative" emphasize medical practice, "collaborative" emphasizes the relationship between the practitioners. Since doctors of medicine and licensed CAM practitioners will be delivering the medicine, respectful cooperation between them is the only way we will ever achieve truly integrated health services, to the incalculable benefit of the patient.

References

1. CAM on PubMed FAQ.

2. NIH-NCCAM Fact Sheet. Major Domains of Complementary and Alternative Medicine.

New & Noteworthy

Will There Ever Be a Comprehensive CAM Database?

Right now, comprehensive CAM literature searching means searching across more than 10 different databases – from the biomedical to botanical, from familiar databases such as MEDLINE and CINAHL to small, specialized databases such as HOMEOInform *<http://www.hom-inform. org>*, a database from the British Homeopathic Library. Lack of standardized terminology and lack of access are two critical issues influencing retrieval of information from the CAM knowledge base. The Rosenthal Center Directory of Databases *<http://www.rosenthal.hs.columbia.edu/ Databases.html>* lists the range of resources available for searching, including private or difficult to access databases. Use this list when deciding how far to take a search process once the essentials (MEDLINE, EMBASE, etc.) have been covered. The creators of this Web resource have published an article describing a prototype for a comprehensive CAM information resource. They discuss the steps taken since 1997 towards developing a gateway system that would allow searching cross-databases as well as a multiple thesauri management and cross-database search system. Working with the International Collaboration for Information on Complementary and Traditional Medicine (IC2TM) as well as with CAM database producers, there are many questions yet to be answered. This is an exciting project that is worth watching.

Kronenberg F, et al. *A comprehensive information resource on traditional, complementary, and alternative medicine : toward an international collaboration.* **J Altern Complement Med** 2001;7(6):723-729.

Glossary of CAM Terms

A consumer's glossary of CAM terms, in both French and English, can be found on the Tzu Chi Institute's Web site at *<http://www.tzu-chi.bc.ca/glossaryEnglish.htm>* and *<http://www.tzu-chi.bc.ca/glossaryFrench.htm>*. Written as a supplement to a suite of new, but as-yet-unposted frequently asked questions (FAQs) on CAM for the Canadian Health Network, this continually evolving resource enhances existing dictionaries such as Segen's *Dictionary of Alternative Medicine* (new edition due from Prentice Hall Health in 2002).

Integrative, Combination, Complementary, Collaborative... What *Is* This New Type of Medicine?

Terminology remains an issue in ferment in the CAM community. As seen above, it arises in multiple contexts – from constructing thesauri to enhance database retrieval, to the day-to-day struggle to reach consensus around definitions for terms which may have a different flavour depending on one's cultural or educational background, and professional perspective. The state of linguistic flux in CAM is reflected in *Integrative medicine...*, an article by leading advocates of integrative medicine in the U.S. that expands on the difference between "combination medicine" – that is, adding CAM to conventional medicine – and "integrative medicine." Integrative medicine "represents a higher-order system of systems of care that emphasize wellness and healing of the entire person (bio-psycho-socio-spiritual dimensions) as primary goals, drawing on both conventional and CAM approaches in the context of a supportive and effective physician-patient relationship." This model naturally raises concerns over research methods for measuring health outcomes. An essential read for administrators, researchers and clinicians seeking to understand complementary/integrative medicine and its role in the health system.

Bell IR, et al. *Integrative medicine and systemic outcomes research.* **Arch Intern Med** 2002;162:133-140. •

MLA Video "Sync or swim : managing the flood of PDAs in health care" to be Purchased by CHLA/ABSC

*http://www.mlanet.org/education/telecon/pda/index.html*

The teleconference, presented on February 6 2002, had a huge response with more than 100 sites and 3000 participants. For those CHLA/ABSC members who were not able to participate (due in part to the cost of connecting to the teleconference), CHLA/ABSC has purchased the video to be made available via interlibrary loan; W.K. Kellogg Health Sciences Library at Dalhousie University has offered to host the video. For more information on the teleconference or if you wish to purchase a copy for your library, see the above link. Also, a link to MED-PDA discussion group can found there.

Consuming Health Information

Susan Murray[1]

A round up of CHI items from a variety of sources

CHI Bibliography
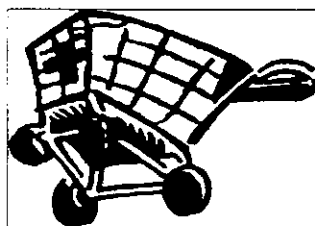
The Consumer Health Information Service (CHIS) has just revised *"Consumer health information : selected bibliography"* <http://www.tpl.toronto.on.ca/uni_chi_index.jsp>.
An overview guide on complementary and alternative medicine in addition to a guide on herbal supplements are currently in production and should be on the CHIS homepage soon.

Collection Development : A Few Recent Items

Rosenfeld, Isadore. ***Power to the patient : the treatments to insist on when you're sick***. New York: Warner Books; 2002. 448 pp. ISBN: 0-446-52694-0. $36.95 CDN.

Contains information on the proper diagnosis and latest treatment for 40 common ailments. Encourages consumers to be proactive – each chapter includes a "what to insist on if you have..." section. Also includes a "checkup or checkout" chapter to explain why checkups are important and how often they should be done.

Below are several sources (one free!) on complementary and alternative medicine that are good additions to any CHI collection:

Rees, Alan. ***Complementary and alternative medicine information source book***. Westport, CT: Oryx Press; 2001. 229 pp. ISBN: 1-57356-388-9. $49.95 US. <http://www.greenwood.com/books/BookDetail.asp?dept_id=1&sku=OXCAMIS>.

An excellent overview of CAM resources – even includes Canadian content! Rees takes the same approach that he has with his authoritative ***Consumer health information source book***: he provides an overview of CAM in the preface and first section, a listing of more than 300 CAM organizations, and extensive annotations of print and electronic sources. *Section 2* lists 61 outstanding CAM resources – books and periodicals are separated by titles for consumers and those for professionals. The appendices include: major domains of CAM practices, frequently asked questions about CAM, considering CAM, as well as locating CAM on MEDLINE and other related databases.

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Perspectives on complementary and alternative health care : a collection of papers prepared for Health Canada, July 2001. 113 pp. ISBN: 0-662-30120X. Available in pdf format from: <http://www.hc-sc.gc.ca/hppb/healthcare/cahc/index.html>. Hard copies available from Health Canada (address listed at above URL).

Includes seven papers on the following topics: definition, policy context, integrative health care, regulatory aspects, information and informed choice.

WellnessOptions. Toronto: WellnessOptions Publishing Inc. of Canada. ISSN: 1496-1008.

This Canadian-published complementary and alternative health journal – advertised on the Web site as "Canada's first integrated health magazine" – has an impressive list of Canadian and international advisors with a variety of backgrounds. The journal is published six times a year and is organized in four sections: *Perspectives* (e.g., "revolution in aging," "what is pain"), *Trends* (e.g., statistics, wellness Web watch), *Body* (e.g., exercises, short articles) and *Gourmet* (covers topics, such as "is tea beneficial to health?" and "will pasta make me fat?"). Now in its second year, the journal has been distributed with *The Globe & Mail* and is available at selected Indigo, Chapters and International News locations. Personal subscriptions are also available for $30 (plus GST) a year from <http://www.wellnessoptions.ca> or phone 1-866-222-WELL.

Health Literacy

The February 2002 *Focus on Basics* (vol. 5, issue C), published by the U.S. National Center for the Study of Adult Learning and Literacy is a special issue on health literacy. The complete text is available in text or pdf formats at: <http://www.gse.harvard.edu/~ncsall/fob/>.

CAPHIS (Consumer and Patient Health Information Section) of the Medical Library Association

CAPHIS has a new brochure that will be on the Web site <http://caphis.mlanet.org/> soon. However, if you would like the printed version of the brochure, please contact me for a limited number of copies.

Medical Library Association (MLA)

Abstracts, full-text and pdf format of articles from the *Symposium on Patient-Centered Librarianship*, *Journal of the Medical Library Association*, January 2002, vol. 90(1) are available from: <http://www.pubmedcentral.nih.gov/tocrender.fcgi?journal=93>.

Some of the titles are:

- *Adjusting to progress : interactions between the National Library of Medicine and health sciences librarians, 1961–2001* by Betsy L. Humphreys.

- *Bringing the best of medical librarianship to the patient team* by Barbara S. Shearer, Anne Seymour, Cheryl Capitani.

- *Consumer-driven, patient-centered health care in the age of electronic information* by Nancy Calabretta.

Online health consumerism. MLA News. March 2002, p.5. Submitted by Mary Jo Dorsey.

An annotated list of seven CHI Internet resources. The full-text of *MLA News* beginning with the January 2002 issue is available to members at: *<http://www.mlanet.org/members/mla_news/2002/mar_02/inet_resource.html>*.

MEDLINEplus:

MEDLINEplus has added eleven new *Interactive Health Tutorials*, on topics such as Acne, Ultrasound and Neurosurgery. The tutorials are interactive health education resources from the Patient Education Institute. Using animated graphics each tutorial explains a procedure or condition in easy-to-read language; the tutorials require a Flash plug-in, version 4 or above. If you do not have Flash, you will be prompted to obtain a free download of the software before you start the tutorial. *<http://www.nlm.nih.gov/medlineplus/tutorial.html>*.

Current Research

Compiled by Andrea Hodgson

Weller, AC. *Qualitative and quantitative measures of indexed health sciences electronic journals. JAMA* 2002 Jun 5;287(21):2865-6. PMID: 12038935.

CONTEXT: Little is known about qualitative and quantitative characteristics of indexed health sciences electronic journals (e-journals). METHODS: To determine peer-review practices and qualitative and quantitative characteristics of different types of indexed health sciences e-journals, 3 types of e-journals indexed in MEDLINE were compared (type 1, completely electronic with no print counterpart; type 2, print and electronic versions with the same title but each publishing some unique content; and type 3, print and electronic versions containing equal content). RESULTS: There were 13 type 1 journals, 16 type 2 journals, and 16 type 3 journals. Most journals in each category (85%-94%) imply or state the use of peer review. Significant differences (p<.05, analysis of variance) exist among the e-journals for the inclusion of complex types of publications (clinical trials, randomized controlled trials, meta-analyses and practice guidelines) (15%-100%), editorials (0%-75%), letters to the editor (10%-88%) and case reports (17%-94%); the average number of items indexed in MEDLINE (22.5-544.5); and the number of complex publication types, editorials, letters and case reports. CONCLUSIONS: Type 1 e-journals do not have the qualitative or quantitative complexity of traditional print journals. Although editors statements on editorial peer review are similar, there are differences in number and type of materials included in the 3 different types of e-journals.

Eysenbach G, Powell J, Kuss O, Sa ER. *Empirical studies assessing the quality of health information for consumers on the World Wide Web : a systematic review. JAMA* 2002 May 22-29;287(20):2691-700. PMID: 12020305.

CONTEXT: The quality of consumer health information on the World Wide Web is an important issue for medicine, but to date no systematic and comprehensive synthesis of the methods and evidence has been performed. OBJECTIVES: To establish a methodological framework on how quality on the Web is evaluated in practice, to determine the heterogeneity of the results and conclusions, and to compare the methodological rigor of these studies, to determine to what extent the conclusions depend on the methodology used, and to suggest future directions for research. DATA SOURCES: We searched MEDLINE and PREMEDLINE (1966 through September 2001), Science Citation Index (1997 through September 2001), Social Sciences Citation Index (1997 through September 2001), Arts and Humanities Citation Index (1997 through September 2001), LISA (1969 through July 2001), CINAHL (1982 through July 2001), PsychINFO (1988 through September 2001), EMBASE (1988 through June 2001), and SIGLE (1980 through June 2001). We also conducted hand searches, general Internet searches, and a personal bibliographic database search. STUDY SELECTION: We included published and unpublished empirical studies in any language in which investigators searched the Web systematically for specific health information, evaluated the quality of Web sites or pages and reported quantitative results. We screened 7830 citations and retrieved 170 potentially eligible full articles. A total of 79 distinct studies met the inclusion criteria, evaluating 5941 health Web sites and 1329 Web pages, and reporting 408 evaluation results for 86 different quality criteria. DATA EXTRACTION: Two reviewers independently extracted study characteristics, medical domains, search strategies used, methods and criteria of quality assessment, results (percentage of sites or pages rated as inadequate pertaining to a quality criterion), and quality and rigor of study methods and reporting. DATA SYNTHESIS: Most frequently used quality criteria used include accuracy, completeness, readability, design, disclosures and references provided. Fifty-five studies (70%) concluded that quality is a problem on the Web, 17 (22%) remained neutral, and 7 studies (9%) came to a positive conclusion. Positive studies scored significantly lower in search (p=.02) and evaluation (p=.04) methods. CONCLUSIONS: Due to differences in study methods and rigor, quality criteria, study population, and topic chosen, study results and conclusions on health-related Web sites vary widely. Operational definitions of quality criteria are needed.

Bradley DR, Rana GK, Martin P, Schumacher RE. *Real-time, evidence-based medicine instruction : a randomized controlled trial in a neonatal intensive care unit. J Med Libr Assoc* 2002;90(2):194-201. PMID: 11999177. <http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=11999177>.

PURPOSE: The study assesses potential for improving residents evidence-based medicine searching skills in MEDLINE through real-time librarian instruction. SUBJECTS: Ten residents on a rotation in a neonatal intensive care unit participated. METHODOLOGY: Residents were randomized into an instruction and a non-instruction group. Residents generated questions from rounds and searched MEDLINE for answers. Data were collected through observation, search strategy analysis and surveys. Librarians observed searches and collected data on questions, searching skills, search problems and the test group's instruction topics. Participants performed standardized searches before, after and six-months after intervention and were scored using a search strategy analysis tool (1 representing highest score and 5 representing lowest score). Residents completed pre- and post-intervention surveys to measure opinions about MEDLINE and search satisfaction. RESULTS: Post-intervention, the test group formulated better questions, used limits more effectively and reported greater confidence in using MEDLINE. The control group expressed less satisfaction with retrieval and demonstrated more errors when limiting. The test and control groups had the following average search scores respectively: 3.0 and 3.5 (pre-intervention), 3.3 and 3.4 (post-intervention), and 2.0 and 3.8 (six-month post-intervention). CONCLUSION: Data suggest that measurable learning outcomes were achieved. Residents receiving instruction improved and retained searching skills six-months after intervention.

Ely JW, Osheroff JA, Ebell MH, Chambliss ML et al. *Obstacles to answering doctors' questions about patient care with evidence : qualitative study. BMJ* 2002 March 23;324(7339):710. PMID: 11909789. <http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=11909789>.

OBJECTIVE: To describe the obstacles encountered when attempting to answer doctors' questions with evidence. DESIGN: Qualitative study. SETTING: General practices in Iowa. PARTICIPANTS: 9 academic generalist doctors, 14 family doctors and 2 medical librarians. MAIN OUTCOME MEASURE: A taxonomy of obstacles encountered while searching for evidence based answers to doctors' questions. RESULTS: 59 obstacles were encountered and organised according to the five steps in asking and answering questions: recognise a gap in knowledge, formulate a question, search for relevant information, formulate an answer and use the answer to direct patient care. Six obstacles were considered particularly salient by the investigators and practising doctors: the excessive time required to find information; difficulty modifying the original question, which was often vague and open to interpretation; difficulty selecting an optimal strategy to search for information; failure of a seemingly appropriate resource to cover the topic; uncertainty about how to know when all the relevant evidence has been found so that the search can stop; and inadequate synthesis of multiple bits of evidence into a clinically useful statement. CONCLUSIONS: Many obstacles are encountered when asking and answering questions about how to care for patients. Addressing these obstacles could lead to better patient care by improving clinically oriented information resources.

Andrus MR, Roth MT. *Health literacy : a review. Pharmacotherapy* 2002;22(3):282-302. PMID: 11898888.

Illiteracy has become an increasingly important problem, especially as it relates to health care. A national survey found that almost half of the adult population has deficiencies in reading or computation skills. Literacy is defined as the basic ability to read and speak English, whereas functional health literacy is the ability to read, understand and act on health information. Up to 48% of English-speaking patients do not have adequate functional health literacy. The consequences of inadequate health literacy include poorer health status, lack of knowledge about medical care and medical conditions, decreased comprehension of medical information, lack of understanding and use of preventive services, poorer self-reported health, poorer compliance rates, increased hospitalizations and increased health care costs. The medical community must acknowledge this issue and develop strategies to ensure that patients receive assistance in overcoming the barriers that limit their ability to function adequately in the health care environment.

Montori VM, Tabini CC, Ebbert JO. *A qualitative assessment of 1st-year internal medicine residents' perceptions of evidence-based clinical decision making. Teach Learn Med* 2002 Spring;14(2):114-18. PMID: 12058546.

BACKGROUND: Residents' perceptions about evidence-based clinical decision making remain largely unexplored. PURPOSE: To understand how residents perceive and use evidence-based medicine in clinical decision making. METHODS: Qualitative study using a semi-structured questionnaire and focus group in a postgraduate training program in internal medicine at an academic U.S. medical center. Seventeen 1st-year internal medicine residents in their 1st postgraduate year were interviewed. Six additional 1st-year residents formed a validation group. RESULTS: The interplay of time and expertise modified how physicians-in-training incorporate evidence into clinical decision making. When time was available, the residents preferred to answer their questions by searching and critically appraising the literature. This "self-acquired" expertise empowered them to help patients by using participatory decision-making styles. When time was limited, the residents turned to experts. Residents assumed that experts practiced evidence-based medicine. This "borrowed" expertise was thought to be the most efficient way of integrating evidence and clinical expertise, but it led to the use of a parental style when answers were taken back to the bedside. CONCLUSION: The practice of evidence-based medicine empowers 1st-year residents and appears to affect their choice of decision-making style. Further research is needed to better understand the link between decision-making style and evidence-based medicine.   ◆

Cyberpulse

Rita Vine[1]

Presentation Tips for the Conference and Classroom
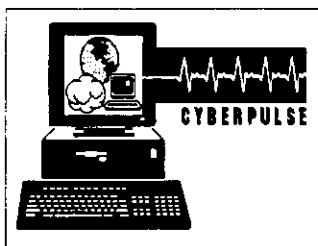
Adding visuals to a presentation in the form of Powerpoint slide shows or Web page demonstrations is an essential component of a complete presentation. Its great benefit is the visual 'memory' that it offers learners, providing additional clues, images and reinforcements to the verbal message. Visuals help learners get the point faster, enabling the presenter to move quickly.

When should Internet trainers use Powerpoint, and when should they resort to something else, like a live Internet presentation or canned downloads of actual Web pages? Here are some rules of thumb that can be used to save time and enhance results:

Online Classroom? Go live if you can. The allure of a computer is quite irresistible to a student sitting in an online classroom, and they do not want to wait long until they can point, click and keep up with the instructor on their own computer. If the teaching classroom has reliable Internet connections, Powerpoint slides are best used for VERY BRIEF overviews prior to demonstrations and hands-on practice, or reserved for backup in cases of mission-critical training that cannot be rescheduled if the network falls apart.

Conference presentations? Think about risk. If you are scheduled to speak at a large national conference with many Internet presentations on the agenda, you can be reasonably assured of a reliable network connection with automatic IP network detection if you have an Internet-ready PC-compatible laptop that has a network card already installed. It is vital to contact the AV support team through your session convenor in order to confirm the availability of high speed network connections. Avoid using a dialup connection in a public presentation as it is too slow, and if you disconnect you lose valuable time and your audience's attention. If a dial-up connection is the only option, consider using a Powerpoint presentation with pictures and/or graphics of online materials you are discussing.

Think carefully before going live in a conference setting. A theatre-style setup where viewers are simply watching a presentation enables, and even encourages, a presenter to move along more quickly than she would or could in an online classroom, where everyone is active and clicking. Even though high speed connections are quite fast, most theatre-style viewers prefer to view a faster-moving presentation than even live connectivity allows. A good middle-

ground position is to use offline methods for the presentation and reserve online live connectivity to demonstrate during question periods at the end of the presentation.

If part or all of the content is delivered using offline tools, there are two choices. First, an offline browser software that downloads the entire contents of a Web page to the hard drive can be used; it downloads quickly in a browser and can be bookmarked, then brought up again offline during a presentation. Commercial software such as Catch-the-Web <http://www.catchtheweb.com/> and several others can do the job nicely [1], but presenters have to buy the software, download it, learn it and feel comfortable enough to use it under pressure in public performance. Alternatively, Internet Explorer version 5 and higher allows you to download a complete Web page (images and all) to the hard drive in one step with the SAVE AS command in the FILE menu. Once downloaded, find the main page link and click, and everything appears offline in your browser as in the original. This free tool is usually sufficient for most web-heavy presentations.

Another tool to consider is slide creation software like Powerpoint. Powerpoint enables you to capture screen shots and copy them into a slide, then stretch or shrink the image to fit the size of the slide. The process for shooting and copying screens is fairly easy – open a blank slide in Powerpoint, toggle to the browser window, take a screen shot of the window using ALT/PRINTSCREEN, then toggle back to the empty slide and paste the screen shot right into the slide. Be sure to stretch or shrink the slide by the corner handles to retain the aspect ratio, or else the a screen shot will look like it was shot through a carnival fun house mirror.

In a time-sensitive conference presentation, Powerpoint slides enable presenters to move more quickly and make points faster than with offline browsers. Powerpoint slides can be enhanced for viewing ease by adding AutoShape arrows and circles around important visual content in the image. For example, I like to put red circles around the page information that I am discussing because it makes it easier for viewers to zero in on the spot without a lot of additional pointing or gesturing.

Transporting Your Presentation

It is likely that a presentation will be prepared on one computer and delivered on another. How can a large presentation be transferred quickly and safely on to second computer?

The best option for large PowerPoint presentations with lots of screen shots is to copy the entire presentation onto a recordable CD ROM, then transfer it to a laptop CD ROM. Try to avoid using the 'pack and go' option in PowerPoint to compress a presentation. Although this works well for straight text presentations, graphics-rich presentations compress by removing

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image pixels, which are never recovered during decompression.

No CD ROM? E-mail the presentation to yourself as an attachment, then download the e-mail and save the attachment from the presentation computer. If the computer is at a conference site, get in the habit of sending a backup of the presentation to a free e-mail account like Yahoo! Mail or Hotmail (Yahoo! even offers up to 30 Mgs of virtual storage space as part of its free service), so in case the presentation is forgotten, lost, or otherwise destroyed, there is an available copy of it somewhere.

Selected Web Resources for Presenters

Check out these sites for some great tips, tricks and tutorials:

. Presenters Guide to Media Selection
. *http://www.kodak.com/US/en/digital/av/presenters/lesson_1/*

This is an excellent tutorial from Kodak on how to select the media for your presentation based on your goals, objectives and needs.

. Tech Tutorials - Powerpoint
. *http://www.techtutorials.com/Applications/Microsoft_Office/PowerPoint/*

The Tech Tutorials Web site offers over 1700 free tutorials on all kinds of computer applications, including half a dozen Powerpoint tutorials. I particularly liked the large pdf version at *<http://www.customguide.com/demos/powerpoint2000.pdf>*, which is written to conform to Microsoft Office User Specialist (MOUS) level I and II exam objectives.

. Presenters University
. *http://www.presentersuniversity.com/*

Sponsored by projector maker InFocus Corporation, Presenters University is one of the top starting points for professional presenters who use multimedia technology. Check out the "Courses" section for great tips and tricks for content and delivery as well as good multimedia tips.

Offline Tools

1. For an overview of offline tools, see: Steve Bell. *Oh no! I can't get on the Web : offline strategies for Internet content presentations.* **Searcher** 2000 Mar;8(3) *<http://www.infotoday.com/searcher/mar00/bell.htm>*.

2. CNET has a useful list of offline browser tools at *<http://download.cnet.com/downloads/0,10151,0-10067-106-0-1-0,00.html?tag=dir>* ♦

Grant Awarded to Develop Knowledge-based Resources, Technology and Training Via PDA

http://listserv.buffalo.edu/archives/medlib-l.html

The OSF St. Francis Medical Center Library & Resource Center together with the University of Illinois at Chicago of the Health Sciences - Peoria was awarded a $50,220 (US) *Library Services and Technology Act* grant from the Illinois State Library. These libraries will provide critical knowledge-based resources delivered at point-of-care by PDA. Specifically, the funding will purchase handheld computers for use by medical staff, access to databases and e-books and training on how to use the hardware and software. Through this grant, the libraries will be among the first in the United States to pilot the use of Ovid@Hand. For more details concerning this grant see MEDLIB-L archives, October 2001, 5th week.

Lori Bell

REVIEWS/CRITIQUES

Complete Internet companion for librarians. 2nd ed. Allen C. Benson. New York, NY: Neal-Schuman; 2001. ISBN 1-55570-414-X. 562 pp.

In the second edition of this seven part handbook, Benson attempts to explain the Internet; however, this is not as "complete" as the title suggests. While the book has redeeming sections, it fails to act as a one-stop source for librarians looking for answers about the Internet.

Benson provides an extensive and well laid-out table of contents in this edition, which comes seven years after the first edition was published. His aim is to help librarians with current issues such as copyright, access, security and other issues in dealing with new technologies.

Several chapters proved useful, especially *Chapter four : Librarian's role in the global network environment.* The author provides good tools for evaluating Web pages and timely resources. Other useful chapters focus on hardware requirements, security and virus protection, telnet applications and mailing lists. Other chapters are terribly out of date with references to resources dating back three to five years, overviews of technology rarely or never used today, including prices which are first, U.S.-based and second, out of date immediately after publication. Such details should have been excluded from many of the chapters.

The biggest flaw with this compilation is that it is merely a collection of lists of Web pages on a particular topic, but fails to explain the topic in-depth or in full range. A search engine could easily provide the reader with a similar list; it would have been more useful to have a thorough explanation of the topics and what they offer to libraries. Where detailed explanations are provided, it fails to provide a "beginning to end" description; either the author does not provide the preliminary or fundamental details, or topics are left suspended where further detail would have proven useful. Rarely are topics dealt with satisfactorily in full.

Although this text is useful in part, it would not be a suitable purchase for those who wish to buy just the one book to become familiar with the Internet for libraries. Perhaps the third edition will provide a complete source for librarians wishing to become familiar with the Internet either for the first time or as a more experienced user. ♦

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Risk communication and public health. Peter Bennett, Sir Kenneth Calman, editors. London: Oxford University Press; 2001. ISBN 0198508999. 272 pp. $65.50 CDN.

Blame, suspicion and fear: risk communication conjures images of "spin doctoring," as public relations personnel try to calm an outraged public. What this collection makes clear is that risk communication is a series of complex interactions between several participants all with their own biases, often on controversies concerning public policy and large sums of money. Although easy to point an accusing finger at the media, public perception is based on more than scare mongering. The public, whether as citizen or consumer, wants a wide-ranging investigation of a given issue and is no longer willing to rely on scientific experts as having all the answers; consider the current debate on embryonic stem cell research. Representatives from government, the scientific community and the private sector need to engage in a responsive dialogue with interested parties to first establish and maintain some measure of trust and then to reach a workable consensus or policy.

The contributions in this collection had their genesis in a 1997 conference sponsored by the Department of Health in the United Kingdom. Two years later the hardcover edition was published, and now the paperback version has been issued.

The papers represent more than "conference proceedings" however. The individual authors have written full-fledged papers on their respective topics; the editors have deftly indexed and organized the papers into four sections: *Research, Lessons from prominent cases, Institutional issues* and *Putting theory into practice.* Peter Bennett, one of the editors, has supplied the first chapter that acts as a general introduction and includes cross-references to greater detail later in the book. Each chapter contains its own list of references.

The papers are well written and offer a thoughtful and thorough approach of the topic – but this is not a quick, easy read. Several models of risk communication are presented, and the supplementary diagrams are helpful in understanding the process. The nature of risk and the limits of scientific inquiry (and their apparent lack of influence on a jaded public) are explored. The authors themselves work in academia and government, several having direct experience in past public debates; many are now the beneficiaries of hindsight. There is some duplication as authors discuss important public questions, such as bovine spongeform encephalopathy (BSE) or genetically modified foods. While the emphasis is on Britain, the models, lessons learned and suggested public forums are applicable to Canadian public discourse.

Risk communication and public health would be of use in academic libraries or government libraries with a strong research focus. For a primer on risk communication, including "fright factors" and "media triggers," see ***Communication about risks to public health : pointers to good practice*** *<http://www.doh.gov.uk/pointers.htm>* also written by Peter Bennett. ♦

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Managing information in healthcare : concepts and cases. J.A. Worthley. Chicago, IL: Health Administration Press; 2000. ISBN 1-56793-131-6. 315 pp.

John Worthley has written extensively about the use of computers in healthcare over the past two decades and his *Managing computers in healthcare* is a minor classic. Recognizing that the world of health informatics has increased in sophistication since his earlier book (which went through three editions), Worthley stays with the same textbook format but adopts a perspective more relevant to health information's current administrative and executive stakeholders. The focus in this new work is, therefore, on information rather than computers (as is suggested by the book's title).

Topically, *Managing information in healthcare* includes chapters on *Information management concepts, The social and organizational impact of health information management, Security and privacy, User resistance* and various other management questions as they pertain to health information. Of particular note is the fact that Worthley devotes so much space in the book to the sociopolitical (rather than technical) side of health information management — a topic under-represented in the literature, yet centrally important to the success of health information management initiatives. Some of these chapters, such as *Organizational impacts*, are of general relevance to the implementation of all information systems, although Worthley carefully grounds his examples and cases in the healthcare sector.

As a textbook, the book works well. Each chapter is supplemented with one or more readings drawn from previously published sources and questions for discussion. These provide substantial fodder for class discussion but are somewhat disruptive for the self-directed reader. For this latter group, a more integrated approach would have been appreciated. However, a decent index is included, as are excellent lists of references. This book should definitely be a part of any library with a health informatics collection. It will also interest hospital-based librarians and library managers whose systems are increasingly part of a larger whole.　　◆

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Statistics and performance measures for public library networked services. John Carlo Bertot, Charles R. McClure, Joe Ryan. Chicago: ALA; 2001. ISBN 0-8389-0796-2. 103 pp. $38 CDN.

While the authors state quite clearly that the mission of the book is to assist public librarians in developing, maintaining and reporting standardized network statistics and performance measures, I believe that this focus can apply equally to librarians in other specialities, including health care. True, the book is based on a United States grant study to develop a national standard on public library statistics, however it is not just public libraries that need new measures for reporting virtual visits and electronic resource access. Most libraries are facing the problem that traditional statistical measures do not accurately depict library usage in a networked environment.

The authors offer recommendations as to what numbers to collect, presenting standardized definitions of performance measures including who should collect the data, how, how often and why that information can be useful. Composite and performance measures are introduced, as well as the integration of online and traditional data, data management and analysis and issues in the selection of appropriate measures. Although the authors place more emphasis on quantitative measures, they also include a chapter on user satisfaction surveys and focus groups. Sample press releases demonstrating ways that statistics can be used to bolster your library's profile, data collection worksheets, and a sample questionnaire are distributed throughout the text.

The book is well organized with a detailed *Table of contents* and *Index*. The bibliography is current, covering works published between 1995 and 2000 and including Web sites as well as monographs and journal articles.

Bertot and McClure are professors at the School of Information Studies at Florida State University (FSU) and directors of FSU's Information Use Management and Policy Institute. They have collaborated on several publications prior to this one, in the areas of Internet connectivity and Web usage statistics, particularly as they pertain to public libraries. Bertot was co-principal investigator for the public library grant study while Ryan, a research associate with Syracuse's School of Information Studies, served as the project manager for the study.

This book is a good introductory guide for any library that is just getting started with collecting data about online use and for consortia wanting to standardize the collection of data. However, special librarians will need to determine which of these measures can suitably be applied to their settings or how they might be modified to meet local needs. For them, the list of statistical measures appeals both as examples of types of data to collect and as a documentation of recommended measures. Given this, I recommend this book for any health library that is beginning to collect statistics in a networked/online environment. It is too basic for use in a larger academic health library or in a library that already has an established system for the collection of this type of statistical data.　　◆

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The library Internet trainer's toolkit. Michael T. Stephens. New York: Neal-Schuman Publishers Inc; 2001. ISBN 1-55570-415-8. 223 pp. $149.95 US.

Librarians have been thrown in the new role of trainer in this rapidly expanding age of technology. Part of the *Neal-Schuman netguide series*, this book includes everything that you need to present and teach

12 different Internet courses plus a section on how to use this toolkit.

The author, Michael T. Stephens, has been developing training programs at the St. Joseph County Public Library in South Bend, Indiana which helped him to the create the foundation for the **Library Internet trainer's toolkit**. His role at this facility is as a Networked Resources Training Specialist. The book's organization reflects his experience as a trainer as it contains modules, each with an introduction, a list of skills that the workshop attendees will gain and the actual course script and slides. The courses include basic computer and Internet skill sessions, such as *Introducing the personal computer*; sessions discussing security and literacy of Internet materials, such as *Evaluating Web sites* and *Surfing safe!*; a variety of sessions for both personal and business Internet needs, such as *Planning and maintaining a Web site for small business*; and discussions on the multimedia mediums, such as *Exploring Internet video and audio*.

Along with the book is a CD ROM that contains the material found in the book in over 400 PowerPoint slides. By combing the contents of the CE with Microsoft Power Point the trainer can easily customise, update and tailor the slides and scripts for the trainer's own library's needs and interests. The book has the scripts ready for you to use when you actually teach the course — it is truly a 'ready-to-teach' toolkit. The scope and language of the book make it very easy for anyone to use. This reviewer found this book to be extremely helpful in preparing for courses recently taught and recommends it as a worthwhile addition to any collection of library course material. ◆

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Does Wireless Technology Interfere with Hospital Equipment?

http://www.rnpalm.com/EMI.htm

http://listserv.buffalo.edu/archives/medlib-l.html

Such devices are allowed only a small amount of incidental emission that occurs from digital hardware. While these devices emit a very small amount of noise into the radio spectrum, it is not comparable to the power output of cell phones (which have more). In terms of infrared, the beam will not interfere with the currents in wires; any question of interaction would be with other infrared sources and receivers in the immediate area of the device in use. Ultimately, the only way to determine a risk of interference would be to have all concerned devices together and do a close-in test. For more information see the above links (MEDLIB-L archives, October 2001, 5th week).

Laurel K. Graham

NEWS & NOTES

Topics for *BMC*

If you are thinking about writing for **BMC**, but need some ideas, we have put together a list of topics of interest to health sciences librarians on the Web site <*http://www. chla-absc.ca/bmc/help.html#topics*>:

Health Care
- Personal health space - personal medical records (electronic health record)
- Primary health care reform, health system integration (e.g., IDSs), health information networks, etc.
- Provincial health information networks - role of librarians, role of consumer health information, role of knowledge

Libraries
- Accreditation (Library - JCAHO and AHIP through MLA)
- Collection Development (all media – methods and issues); Licensing (management, negotiation, etc.)
- Databases, handhelds & the Internet (e.g., an article on new features of a database or bibliography of links, etc.)
- Digital libraries
- Distance services
- Education: teaching (resident/med student/nursing curriculum development, library/faculty integration, etc.)
- Grants (identifying, writing and obtaining)
- Health information services
- Intranet information delivery
- Library management, consortia, partnerships, collaboration with other sectors

- Working in remote/rural environment (e.g., role of internet & national consortiums & how this has impacted libraries/librarians in these settings)
- Searching databases, the Internet, other electronic resources (or handsearching)
- Reference (how to ask a reference question, bridging evidence-based practice and reference, practical tips about health sciences reference work)

Consumer Health
- Consumer health information services

Evidence-based Health Care
- Evidence-based practice
- Evidence-based librarianship

Librarianship
- Education (continuing, current health sciences curricula of library schools, etc.)
- Health librarianship recruitment (methods for marketing or ideas for better integration of students into library environment)
- New and changing roles for librarians
- Research done in libraries or by librarians; how to conduct research

This list is by no means comprehensive and a variety of articles are sought for each issue. If you wish to add topics to this list, please send your suggestions to Ellen Crumley at *ellencrumley@netscape.net* or Andrea Hodgson at *hodgsona@ms.umanitoba.ca*>. We look forward to receiving your submissions! ◆

New Search Option in PubMed
Systematic Review Filter

http://www.nlm.nih.gov/bsd/pubmed_subsets/sysreviews_strategy.html

A new search filter, Systematic Reviews, has been added to *PubMed.gov* on the *Clinical Queries* screen (link from the PubMed blue sidebar). The Systematic Reviews filter will retrieve citations for systematic reviews, meta-analyses, reviews of clinical trials, evidence-based medicine, consensus development conferences, guidelines and citations to articles from journals specializing in clinical review studies. This subset is not available on the *Limits* screen, but it can be used in a search as systematic [sb]. See the above link for the search strategy used to create the filter. Please note: exercise caution when using this filter as it has not been tested.

Best Evidence CD ROM Replaced by ACP Journal Club Online

http://www.acpjc.org/Content/135/3/ISSUE/ACPJC-2001-135-3-A12.htm

The online medium will be replacing the Best Evidence CD ROM media for several good reasons. Firstly, the online will always be up to date instead of the once-a-year release of the CD ROM. Secondly, the ACPJC Web site will soon be integrated into the American College of Physicians – American Society of Internal Medicine (ACP-ASIM) resources. In addition, ACPJ online will become a membership benefit to all ACP-ASIM members. "Best Evidence" has disappeared from Ovid's Evidence-Based Medicine Reviews and replaced with ACP Journal Club.

R. Brian Haynes

PubMed/MEDLINE indexing of Cochrane Reviews

http://www.cochranelibrary.com/Cochrane

http://www.nlm.nih.gov/pubs/techbull

NLM has been indexing the *Cochrane Database of Systematic Reviews* (*Cochrane Reviews*) for MEDLINE since Summer 2000. To access the full-text version of Cochrane Reviews, here are some options: a) submit a request to DOCLINE; b) request a copy from the publisher; c) see the article *Cochrane Databases of Systemic Reviews included in MEDLINE* in the February 6, 2002 issue of the *NLM Technical Bulletin* (see second link above).

NLM – Pacific Northwest Region

Library Book Rate
New 3-Year Agreement Reached

An agreement has been reached that covers the next three years for the Library Book Rate (LBR). The new rates can be found on Canada Post's Web site: *<http://www.canadapost.ca/business/offerings/supplementary_services_bus/can/library-e.asp>*. The CLA is still seeking survey input for their study on the LBR; more information can be found on the CLA's Web site: *<http://www.cla.ca/top/whatsnew/wnjn2802_2.htm>*.

Methods of Tracking Search Strategies : Responses

http://listserv.buffalo.edu/archives/medlib-l.html

If you ever wanted to know whether and how you should keep the searches you do, here is a sample collated from MEDLIB-L responses. The topic is entitled *SUMMARY – Search Databases* and is available under February 2002 1st week (Posted February 6, 2002, author Marcy Brown).

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